Refine Search

Search Results -

Term	Documents
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(L3 NOT L4).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

Database:

Database:

US Pre-Grant Publication Full-Text Database
US OCR Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

L5

Refine Search

Recali Text
Clear
Interrupt

Search History

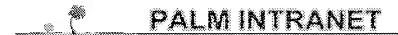
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side by side			Name result set
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<u>L4</u>	L3 and (oedema or diarrhia)	7	<u>L4</u>
<u>L3</u>	(porcine or swine) same (FUT1 and polymorphism)	10	<u>L3</u>
<u>L2</u>	Bosworth-Brad-T\$.in.	8	<u>L2</u>
<u>L1</u>	Bosworth-Brad.in.	1	<u>L1</u>

END OF SEARCH HISTORY

Set Name Query

Hit Count



Day: Wednesday

Date: 11/15/2006

Time: 16:38:50

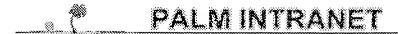
Inventor Name Search

Enter the first few letters of the Inventor's Last Name. Additionally, enter the first few letters of the Inventor's First name.

Last Name	First Name	
Vogeli	Peter	Search

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Day: Wednesday

Date: 11/15/2006

Time: 16:38:50

Inventor Name Search

Enter the first few letters of the Inventor's Last Name. Additionally, enter the first few letters of the Inventor's First name.

Last Name	First Name	
Bosworth	Brad	Search

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SCORE Search Results Details for Application 09844268 and Search Result us-09-844-268-12.rge.

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OM nucleic - nucleic search, using sw model

Run on:

November 13, 2006, 16:38:38; Search time 7441 Seconds

(without alignments)

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Title:

US-09-844-268-12

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Scoring table: IDENTITY NUC

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Searched:

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Total number of hits satisfying chosen parameters:

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Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

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Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ACCESSION
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VERSION
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KEYWORDS
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REFERENCE
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  AUTHORS
           Bosworth, B.T. and Voegeli, P.
  TITLE
           Methods and compositions to identify swine genetically resistant to
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           Patent: EP 1310570-A 12 14-MAY-2003;
  JOURNAL
           Biotechnology Research and Development Corporation (US); U.S.
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ACCESSION
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VERSION
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KEYWORDS
SOURCE
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REFERENCE
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 AUTHORS
         Bosworth, B., Ridpath, J. and Wiseman, B.
          Interactions between genotype and diet in swine that prevent E.
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REFERENCE
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    AUTHORS
                     Cohney, S., Mouhtouris, E., McKenzie, I.F. and Sandrin, M.S.
                     Molecular cloning of the gene coding for pig
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    JOURNAL
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ACCESSION
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VERSION
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 AUTHORS
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  TITLE
           Two alpha(1,2) fucosyltransferase genes on porcine chromosome 6q11
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 JOURNAL
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 JOURNAL
          Technology, Tannenstrasse 1, Zurich, ZH CH-8092, Switzerland
REFERENCE
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Qy

Db

Qy

Db

Qy

Db

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ACCESSION
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VERSION
           AF136896.1 GI:7328563
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REFERENCE
           1
             (bases 1 to 2528)
           Meijerink, E., Neuenschwander, S., Fries, R., Dinter, A.,
 AUTHORS
           Bertschinger, H.U., Stranzinger, G. and Vogeli, P.
           A DNA polymorphism influencing alpha(1,2)fucosyltransferase
 TITLE
           activity of the pig FUT1 enzyme determines susceptibility of small
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 JOURNAL
           Immunogenetics 52 (1-2), 129-136 (2000)
  PUBMED
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REFERENCE
              (bases 1 to 2528)
          Meijerink, E., Neuenschwander, S., Stranzinger, G. and Vogeli, P.
 AUTHORS
 TITLE
           Direct Submission
 JOURNAL
           Submitted (24-MAR-1999) Institute of Animal Science, Federal
           Institute of Technology, Tannenstrasse 1, Zurich, CH 8092,
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ACCESSION
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VERSION
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REFERENCE
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 AUTHORS
        Mckenzie, I.F. and Sandrin, M.S.
        Improved nucleic acids encoding a chimeric glycosyltransferase
 TITLE
 JOURNAL
        Patent: WO 9805768-A 3 12-FEB-1998;
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			1111111	111111	1111111		11111111		\mathbf{H}	
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Db		ATCCGCAGCGAG				1111111			LILLI	
Qy		CAGTTCCGTCT								
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QУ		CGCGGGGACTAT	1111111						11 1	
Db		CGCGGGGACTAT								
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ACCESSION
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VERSION
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SOURCE
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REFERENCE
             (bases 1 to 199471)
 AUTHORS
          Muzny, D., Adams, C., Agbai II, O., Allen, C., Alsbrooks, S., Archer, P.,
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  TITLE
            Direct Submission
  JOURNAL
            Unpublished
REFERENCE 2 (bases 1 to 199471)
  AUTHORS Worley, K.C.
            Direct Submission
  TITLE
  JOURNAL
            Submitted (12-SEP-2005) Human Genome Sequencing Center, Department
            of Molecular and Human Genetics, Baylor College of Medicine, One
            Baylor Plaza, Houston, TX 77030, USA
REFERENCE
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  AUTHORS
            Bovine Genome Sequencing Consortium
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            Direct Submission
  JOURNAL
            Submitted (24-JAN-2006) Human Genome Sequencing Center, Department
            of Molecular and Human Genetics, Baylor College of Medicine, One
            Baylor Plaza, Houston, TX 77030, USA
COMMENT
            On Jan 24, 2006 this sequence version replaced gi:74474967.
            The sequence in this assembly is a combination of BAC based reads
            and whole genome shotgun sequencing reads assembled using Atlas
            (http://www.hgsc.bcm.tmc.edu/projects/rat/). Each contig described
            in the feature table below represents a scaffold in the Atlas
            assembly (a 'contig-scaffold'). Within each contig-scaffold,
            individual sequence contigs are ordered and oriented, and separated
            by sized gaps filled with Ns to the estimated size. The sequence
            may extend beyond the ends of the clone and there may be sequence
            contigs within a contig-scaffold that consist entirely of whole
            genome shotgun sequence reads. Both end sequences and whole genome
            shotgun sequence only contigs will be indicated in the feature
            table.
            ----- Genome Center
                Center: Baylor College of Medicine
                Center code: BCM
                Web site: http://www.hgsc.bcm.tmc.edu/
               Contact: hgsc-help@bcm.tmc.edu
            ----- Project Information
                Center project name: FMZS
               Center clone name: CH240-234F5
            ----- Summary Statistics
                Assembly program: Atlas 3.0;
                Consensus quality: 191995 bases at least Q40
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^{*} NOTE: Estimated insert size may differ from sequence length

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(see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft data.html).
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            ^{\star} runs of N, but the exact sizes of the gaps are unknown.
            * This record will be updated with the finished sequence
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VERSION
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REFERENCE
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  AUTHORS
            Saunier, K., Barreaud, J.P., Eggen, A., Oriol, R., Leveziel, H.,
            Julien, R. and Petit, J.-M.
            Organization of the Bovine alpha2-Fucosyltransferase Gene Cluster
  TITLE
            Suggests that the Secl Gene Might Have Been Shaped Through a
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  JOURNAL
            Mol. Biol. Evol. 18 (11) (2001) In press
REFERENCE
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            Julien, R. and Petit, J.-M.
  TITLE
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  JOURNAL
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           Barreaud, J.P., Saunier, K., Souchaire, J., Delourme, D., Oulmouden, A.,
           Oriol, R., Leveziel, H., Julien, R. and Petit, J.M.
           Three bovine alpha2-fucosyltransferase genes encode enzymes that
 TITLE
           preferentially transfer fucose on Galbeta1-3GalNAc acceptor
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 JOURNAL
           Glycobiology 10 (6), 611-621 (2000)
  PUBMED
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           Saunier, K., Giraud-Delville, C. and Furet, J.P.
           Direct Submission
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 JOURNAL
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REFERENCE
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 AUTHORS
         Lowe, J.B.
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 AUTHORS
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 AUTHORS
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 JOURNAL
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SCORE Search Results Details for Application 09844268 and Search Result us-09-844-268-12.rng.

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Scoring table:

IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched:

5244920 seqs, 3486124231 residues

Total number of hits satisfying chosen parameters:

10489840

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

N_Geneseq 8:*

1: geneseqn1980s:*

geneseqn1990s:*

3: geneseqn2000s:*

4: geneseqn2001as:*

5: geneseqn2001bs:*

6: geneseqn2002as:*

7: geneseqn2002bs:*

8: geneseqn2003as:*

9: geneseqn2003bs:*

10: geneseqn2003cs:*

11: geneseqn2003ds:*

12: geneseqn2004as:* 13: geneseqn2004bs:*

14: geneseqn2005s:*

15: geneseqn2006s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

			ક				
Re:	sult		Query			•*	
	No.	Score		Length	DB	ID	Description
-	 1	1260	100.0	1260			
	2	1269	100.0	1269	2	AAX03811	Aax03811 Swine alp
	3	1269	100.0	1269	2	AAX15872	Aax15872 Fragment
		1269	100.0	1269	3	AAZ94417	Aaz94417 Pig alpha
	4 5	1264.2	99.6	1269	6	AAI72831	Aai72831 FUT1 cDNA
		1245.8	98.2	3315	11		Ado58598 Porcine a
	6 7	1094.8	86.3	1098	2	AAV21640	Aav21640 Pig H tra
	8	808.6	63.7	8174	2	AAQ13332	Aaq13332 GDP-Fuc:b
_		808.6	63.7	8174	2	AAT61677	Aat61677 Human alp
С	9	808.6	63.7	20001		- ACN37237	Acn37237 Human per
	10	807	63.6	8174	2	AAQ56908	Aaq56908 DNA encod
	11	806.8	63.6	3373	2	AAT76768	Aat76768 Human alp
	12	806.8	63.6	3373	6	AAD46825	Aad46825 Human alp
	13	794.2	62.6	1174	2	AAT12238	Aat12238 Human H-t
	14	794.2	62.6	1174	3	AAA53820	Aaa53820 Human H-t
	15	792.2	62.4	3791	2	AAT63575	Aat63575 Chicken b
	16	789	62.2	1155	2	AAT01082	Aat01082 2-Alpha-f
	17	789	62.2	1155	2	AAQ98461	Aaq98461 GDP-L-fuc
	18	789	62.2	1155	2	AAT01083	Aat01083 2-Alpha-f
	19	789	62.2	2268	2	AAT63576	Aat63576 Mouse H2K
	20	610.4	48.1	2720	10	ADB53234	Adb53234 Primary r
	21	454.2	35.8	1043	2	AAV29003	Aav29003 Porcine s
	22	454.2	35.8	1043	2	AAV21639	Aav21639 Pig secre
	23	449.4	35.4	3088	6	ABL66311	Abl66311 Lung canc
	24	449.4	35.4	3088	6	ABL70026	Ab170026 Pancreas
	25	449.4	35.4	3088		ABL64735	Abl64735 Lung canc
	26	447.8	35.3	2115	2	AAV58323	Aav58323 Human Sec
	27	446.8	35.2	1041	13	ADQ83703	Adq83703 Human tum
	28	446.8	35.2	1041	13	ADQ85849	Adq85849 Human tum
	29	427.8	33.7	2000	12	ADQ83704	Adq83704 Human tum
	30	427.8	33.7	2000	13	ADQ85850	Adq85850 Human tum
	31	423.8	33.4	1068	3	AAC67966	Aac67966 Rat hepat
	32	423.8	33.4	1068	6	AAD27208	Aad27208 Rat hepat
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	34	423.8	33.4	1149	. 3	AAC67965	Aac67965 Rat hepat
	35	423.8	33.4	1149	6	AAD27207	Aad27207 Rat hepat
	36	423.8	33.4	1149	8	ABS57886	Abs57886 Rat cDNA
	37	422.2	33.3	1150	10	ADB97787	Adb97787 Rat cDNA
	38	420.6	33.1	1069	10	ADB97783	Adb97783 Rat cDNA
	39	415.2	32.7	556	12	ACH70096	Ach70096 Human gen
С	40	399	31.4	954	12	ACH89801	Ach89801 Human gen
	41	325.2	25.6	434	12	ACH83796	Ach83796 Human gen
	42	309.4	24.4	1071	2	AAX77268	Aax77268 X. laevis
	43	253	19.9	401	10	ABZ84527	Abz84527 Toxicolog
С	44	129.4	10.2	509	12	ACH76100	Ach76100 Human gen
	45	85.8	6.8	473	3	AAC03536	Aac03536 Human sec
							Transcri Scc

ALIGNMENTS

RESULT 1 AAX03811

```
ID
     AAX03811 standard; DNA; 1269 BP.
XX
AC
     AAX03811;
XX
     01-APR-1999 (first entry)
DT
XX
DE
     Swine alpha-1,2-fucosyltransferase 1 encoding DNA.
XX
KW
     Swine; pig; alpha-1,2-fucosyltransferase 1; FUT1; resistance;
KW
     Escherichia coli; infection; oedema; postweaning diarrhoea;
KW
     intestinal disorder; polymorphism; ss.
XX
OS
     Sus scrofa.
XX
FH
     Key
                     Location/Qualifiers
FT
     CDS
                     9. .1106
FT
                     /*tag= a
XX
PN
     WO9853102-A1.
XX
PD
     26-NOV-1998.
XX
PF
     20-MAY-1998;
                    98WO-US010318.
XX
PR
                  97US-0047181P.
     20-MAY-1997;
XX
     (BIOT-) BIOTECHNOLOGY RES & DEV CORP.
PA
     (USDA ) US SEC OF AGRIC.
PΑ
PA
     (SWTE-) SWISS FEDERAL INST TECHNOLOGY ZURICH.
XX
PΙ
     Bosworth BT, Vogeli P;
XX
DR
     WPI; 1999-059746/05.
DR
     P-PSDB; AAW30630.
XX
PT
     New method of identifying swine that are resistant to intestinal
     colonisation by Escherichia coli - comprises use of genetic polymorphic
PT
     markers, used for breeding swine resistant to Escherichia coli-related
PT
PT
     diseases.
XX
PS
     Claim 6; Fig 1; 35pp; English.
XX
     A method has been developed for the identification of swine that are
CC
     resistant to intestinal colonisation by E. coli. The method comprises
CC
     determining whether a genetic polymorphism associated with resistance to
CC
     colonisation is present in a swine sample, and then inferring that the
CC
     swine is resistant if it is homozygous for the polymorphism. The method
CC
     uses the swine alpha-1,2-fucosyltransferase (FUT1) polymorphism. The
CC
CC
     present sequence encodes swine FUT1. The method enables the breeding of
     swine that are resistant to E. coli-related diseases. This method
CC
CC
     comprises breeding swine that have a genetic polymorphism in the FUT1
     gene. More particularly, the identification method identifies swine that
CC
     are resistant to E. coli-related intestinal disorders if, in a sample
CC
     taken, the only nitrogen base at residue 307 in the FUT1 gene is adenine.
CC
CC
    Larger amplified fragments from the assay can be used for RFLP analysis,
    and the assay itself is used as a basis for a kit, applied to swine of
CC
CC
     any age, in detecting polymorphisms associated with E. coli F18
    receptors. The polymorphisms are useful in developing drugs to treat
CC
    swine with E. coli-related diseases. However, a mutated form of the
CC
    porcine FUT1 gene may interfere with the normal enzyme and prevent it
CC
    from producing the intestinal receptor for F18. The detection of
CC
```

```
polymorphic markers in the method disclosed enables the detection and
CC
    treatment of E. coli-related intestinal diseases in swine, where there
CC
    has been no success using antibiotics due to unsuccessful prophylaxis
CC
XX
SO
    Sequence 1269 BP; 219 A; 413 C; 362 G; 275 T; 0 U; 0 Other;
                   100.0%; Score 1269; DB 2;
 Query Match
                                        Length 1269;
 Best Local Similarity
                   100.0%; Pred. No. 3.8e-285;
 Matches 1269; Conservative
                        0;
                          Mismatches
                                     0;
                                        Indels
                                                0:
                                                   Gaps
                                                        0;
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Qy
          CTCGAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 60
Db
Qy
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Db
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Qy
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Db
       181 CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT 240
Qy
          181 CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT 240
Db
Qy
       241 CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA 300
          241 CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA 300
Db
       301 CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG 360
Qу
          301 CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG 360
Db
       361 CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGC 420
Qу
          Db
       361 CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGC 420
       421 ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA 480
Qy
          421 ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA 480
Db
       481 AGGAGCCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCC 540
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Qy
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Db
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Qу
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Qy
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Db
       961 CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Qу
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      Qу
          Db
      1081 CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1140
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      1141 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
Qу
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Db
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Qy
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Db
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Qу
          11111111
      1261 ACCCTGCAG 1269
Db
RESULT 2
AAX15872
ID
   AAX15872 standard; DNA; 1269 BP.
XX
AC
   AAX15872;
XX
DT
   13-MAY-1999
            (first entry)
XX
   Fragment of pHT83xF encoding swine alpha(1,2) fucosyltransferase.
DE
XX
   Swine alpha(1,2) fucosyltransferase; FUT1; Escherichia coli; resistant;
KW
   E. coli-associated intestinal disorder; E coli infection; ss.
KW
XX
OS
   Synthetic.
os
   Sus sp.
XX
FH
   Kev
               Location/Oualifiers
FT
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XX
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XX
PD
   26-NOV-1998.
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    20-MAY-1997;
                 97US-0047181P.
XX
PA
    (BIOT-) BIOTECHNOLOGY RES & DEV CORP.
XX
PΙ
    Bosworth BT;
XX
    WPI; 1999-131692/11.
DR
DR
    P-PSDB; AAW97356.
XX
PT
    identifying swine genetically resistant to E. coli associated diseases -
PT
    using PCR-RFLP to assay for polymorphisms in the alpha(1,2)
PT
    fucosyltransferase 1 gene.
XX
PS
    Claim 6; Fig 1; 19pp; English.
XX
CC
    The present sequence encodes swine alpha(1,2) fucosyltransferase (FUT1).
    The specification describes methods relating to Escherichia coli-
CC
    resistant swine. One of the methods for identifying a swine resistant to
CC
    E. coli-associated intestinal disorders, comprises determining whether
CC
    the base at 307 of alpha(1,2) fucosyltransferasel gene (FUT1) is adenine
CC
    (sic), in which case the swine are resistant. The porcine FUT1
CC
    polymorphisms can be used to develop drugs for the treatment of swine
CC
CC
    having E. coli-associated disease. The methods can also be used in
CC
    breeding programmes to identify swine with resistance to E coli infection
XX
    Sequence 1269 BP; 219 A; 413 C; 362 G; 275 T; 0 U; 0 Other;
SO
 Query Match
                      100.0%; Score 1269; DB 2;
 Best Local Similarity
                      100.0%; Pred. No. 3.8e-285;
 Matches 1269; Conservative
                            0; Mismatches
                                               Indels
                                                                  0:
                                                           Gaps
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Qу
            Db
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Qy
            61 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 120
Db
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Qy
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Db
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Qy
            181 CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT 240
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Qу
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Db
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Qy
           361 CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCCGAGGTAGACAGGC 420
Db
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Db	721 ACGGCCGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCT 780
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Qу	841 ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGCTGG 900
Db	
Qу	901 TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG 960
Db	
Qу	961 CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Db	961 CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Qу	1021 TCTTTAAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGG
Db	
Qу	1081 CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1140
Db	
Qу	1141 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
Db	
Qy	1201 TCCTGTAGCAGGCTGGACACTTATTTCAAGAGTGATTCTAATTGGCTGGACTCAGAGGAA 1260
Db	
Qу	1261 ACCCTGCAG 1269
Db	 1261 ACCCTGCAG 1269

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RESULT 3
AAZ94417
ID
     AAZ94417 standard; DNA; 1269 BP.
XX
AC
     AAZ94417;
XX
DT
     18-JUL-2000 (first entry)
XX
     Pig alpha-1-2 fucosyltransferase FUT1 gene.
DE
XX
     Alpha-1-2 fucosyltransferase; FUT1; pig; polymorphism; Escherichia coli;
KW
KW
     resistance; ss.
XX
os
     Sus scrofa.
XX
FH
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     CDS
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FT
                     /*tag= b
FT
                     /note= "adenine is substituted for guanine in resistant
FT
XX
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     W0200016641-A1.
XX
PD
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XX
PF
     17-SEP-1999;
                    99WO-US021408.
XX
PR
     18-SEP-1998;
                    98US-00151592.
XX
PA
     (BIOT-) BIOTECHNOLOGY RES & DEV CORP.
PA
     (USDA ) US SEC OF AGRIC.
XX
     Bosworth BT, Ridpath J, Wiseman B;
ΡI
XX
DR
     WPI; 2000-283404/24.
DR
     P-PSDB; AAY79302.
XX
PT
     Improving weight gain in swine using swine genetically resistant
     Escherichia coli and feeding swine high levels of plant based protein.
PT
XX
PS
     Disclosure; Fig 1; 33pp; English.
XX
     This is the nucleotide sequence of the pig FUT1 gene encoding alpha-1-2
CC
     fucosyltransferase (see AAY79302). A polymorphism at position 307 of the
CC
CC
     coding region is associated with susceptibility to F18 Escherichia coli
     colonization; pigs homozygous for adenine at position 307 are resistant
CC
CC
     to colonization, while heterozygous animals and animals homozygous for
     guanine at position 307 are susceptible to colonization. A claimed method
CC
     for improving weight gain in pigs involves selecting animals that are
CC
     genetically resistant to E. coli colonization and feeding these animals
CC
    high levels of plant-based protein concentrate. A claimed method for
CC
CC
    preventing F18 E. coli colonization in swine, especially swine that are
    genetically susceptible to F18 E. coli colonization, involves replacing
CC
CC
    some or all of the plant-based proteins in the diet with animal-based
CC
    proteins. The polymorphism in the FUT1 gene is also useful for developing
CC
    drugs to treat swine that have E. coli associated disease. The
    polymorphism can be detected using PCR-RFLP tests (see also AAZ94418-19)
CC
```

```
XX
SO
    Sequence 1269 BP; 219 A; 413 C; 362 G; 275 T; 0 U; 0 Other;
 Query Match
                  100.0%;
                        Score 1269; DB 3;
                                       Length 1269;
 Best Local Similarity
                  100.0%;
                         Pred. No. 3.8e-285;
 Matches 1269; Conservative
                       0;
                         Mismatches
                                       Indels
                                              0:
                                                 Gaps
                                                      0:
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Qу
          CTCGAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 60
Db
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Qy
          Db
        61 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 120
       121 TGCTGGCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGG 180
Qv
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Qy
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Db
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Qy
```

```
Db
       781 TTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGG 840
       841 ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGG 900
Qy
          Db
       841 ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGG 900
       901 TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG 960
Qу
           901 TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG 960
Db
       961 CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Qy
          961 CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Db
       Qу
          Db
       Qy
       1081 CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1140
          1081 CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1140
Db
Qy
       1141 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
          Db
       1141 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
       1201 TCCTGTAGCAGGCTGGACACTTATTTCAAGAGTGATTCTAATTGGCTGGACTCAGAGGAA 1260
Qу
          Db
      1201 TCCTGTAGCAGGCTGGACACTTATTTCAAGAGTGATTCTAATTGGCTGGACTCAGAGGAA 1260
Qу
      1261 ACCCTGCAG 1269
          11111111
Db
      1261 ACCCTGCAG 1269
RESULT 4
AAI72831
   AAI72831 standard; cDNA; 1269 BP.
ID
XX
AC
   AAI72831;
XX
DT
   22-JUL-2002 (first entry)
XX
DE
   FUT1 cDNA.
XX
KW
   Gene; pig; swine; alpha (1,2) fucosyltransferase; FUT1; weight gain; F18;
   Escherichia coli; ss.
KW
XX
   Sus scrofa.
OS
XX
FH
               Location/Qualifiers
   Key
FT
   CDS
               9. .1106
FT
               /*tag= a
FT
               /product= "FUT1"
FT
   mutation
               315
FT
               /*tag= b
FT
               /phenotype= "Confers resistance to F18 E. coli"
XX
PN
   US6355859-B1.
XX
   12-MAR-2002.
PD
```

```
XX
PF
    18-SEP-1998;
                 98US-00151592.
XX
PR
    20-MAY-1997;
                 97US-0047181P.
XX
    (BIOT-) BIOTECHNOLOGY RES & DEV CORP.
PA
PA
    (USDA ) US SEC OF AGRIC.
XX
PΙ
    Bosworth B, Ridpath J, Wiseman B;
XX
ĎR
    WPI; 2002-391652/42.
DR
    P-PSDB; AAB47995.
XX
РΨ
    Feeding swine genetically susceptible to F18 Escherichia coli
PT
    colonization with a low plant protein based diet increases weight gain
    and lowers intestinal disease associated with E. coli infection.
PT
XX
PS
    Claim 1; Col 13-18; 9pp; English.
XX
CC
    This sequence represents the swine alpha (1,2) fucosyltransferase (FUT1)
    gene. A FUT1 gene in which there is a base other than adenine at position
CC
    307, may be used for improving weight gain in swine that are genetically
CC
    susceptible to F18 Escherichia coli. The weight gain may be activated by
CC
    feeding a diet of at least 40% animal based proteins. The feeding method
CC
    is used to control F18 E. coli associated intestinal disease in swine
CC
XX
SO
    Sequence 1269 BP; 219 A; 414 C; 361 G; 275 T; 0 U; 0 Other;
  Query Match
                      99.6%;
                             Score 1264.2; DB 6;
                                                Length 1269;
 Best Local Similarity
                      99.8%;
                            Pred. No. 5e-284;
 Matches 1266; Conservative
                            0; Mismatches
                                               Indels
                                                       0;
                                                           Gaps
                                                                  0;
          1 CTCGAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 60
Qу
            1 CTCGAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 60
Db
         61 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 120
Qу
            61 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 120
Db
Qy
        121 TGCTGGCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGG 180
            121 TGCTGGCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGG 180
Db
        181 CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT 240
Qу
            181 CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT 240
Db
        241 CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA 300
Qy
            241 CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA 300
Db
Qy
        301 CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG 360
            301 CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG 360
Db
        361 CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGC 420
Qу
           361 CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGC 420
Db
        421 ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA 480
Qу
```

Db	421	
Qу	481	AGGAGCCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCC 540
Db		
Qу	541	GGGAGCAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGG 600
Db	541	
Qy	601	TACTGAGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCC 660
Db	601	TACTGAGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCC 660
ДÀ	661	ACGTGCGCCGCGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGTG 720
Db	661	ACGTGCGCCGCGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGTG 720
Qу	721	ACGGCCGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCT 780
Db	721	ACGGCGCTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCT 780
Qу	781	TTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGG 840
Db	781	TTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGG 840
Qу	841	ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGCTGG 900
Db	841	ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGG 900
Qy	901	TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG 960
Db	901	TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG 960
Qу	961	CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Db	961	CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA 1020
Qy	1021	TCTTTAAACCCGAGGCTGCCTTCCTGCCCGAGTGGGCATTAATGCAGACTTGTCTC 1080
Db	1021	
Qу	1081	CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1140
Db	1081	
Qу	1141	AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
Db	1141	
Qу	1201	TCCTGTAGCAGGCTGGACACTTATTTCAAGAGTGATTCTAATTGGCTGGACTCAGAGGAA 1260
Db	1201	
Qу	1261	ACCCTGCAG 1269
Db	1261	 ACCCTGCAG 1269

RESULT 5

```
AD058598
ID
    ADO58598 standard; DNA; 3315 BP.
XX
AC
    ADO58598;
XX
DT
    15-JUL-2004 (first entry)
XX
DΕ
    Porcine alpha-1, 2-fucosyltransferase (FUT1) DNA.
XX
    Detection method; resistance gene; porcine; epidemic diarrhoea;
KW
KW
    Escherichia coli F18 receptor; alpha-1; 2-fucosyltransferase; FUT1; pig;
KW
XX
OS
    Sus scrofa.
XX
PN
    KR2002080504-A.
XX
PD
    26-OCT-2002.
XX
PF
    11-APR-2001; 2001KR-00019282.
XX
PR
    11-APR-2001; 2001KR-00019282.
XX
PA
    (CHOK/) CHO K K.
PA
    (CHOI/) CHOI Y J.
PA
    (LEES/) LEE S H.
XX
PΙ
    Cho KK, Choi YJ, Kim CU,
                             Lee SH;
XX
DR
    WPI; 2003-325954/31.
XX
PT
    Detection of resistance gene against porcine epidemic diarrhea.
XX
    Disclosure; Fig 1; 12pp; Korean.
PS
XX
CC
    The present invention relates to a method of detection of a resistance
CC
    gene against porcine epidemic diarrhoea by examining resistance and
CC
    susceptibility against Escherichia coli F18 receptor. The detection
CC
    involves preparing primers for detecting a mutation of the FUT1 gene, and
    detecting a pig, which shows resistance against porcine epidemic
CC
CC
    diarrhoea, by PCR using the prepared primers and a test sample collected
CC
    from a pig. Also disclosed are sequences of the primers used for the
CC
    detection. The present sequence represents porcine FUT1 DNA.
XX
    Sequence 3315 BP; 648 A; 991 C; 901 G; 775 T; 0 U; 0 Other;
SO
 Query Match
                        98.2%; Score 1245.8; DB 11; Length 3315;
 Best Local Similarity 99.4%; Pred. No. 1.2e-279;
 Matches 1261; Conservative
                              0; Mismatches
                                                  Indels
                                                            1; Gaps
                                                                       1;
          1 CTCGAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 60
Qy
                601 CTGCAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 660
Db
          61 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 120
Qу
             661 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 720
Db
         121 TGCTGGCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGG 180
Qу
            Db
         721 TGCTGGCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGG 780
```

Qу	181	CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT	240
Db	781	CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCCTTT	840
QУ	241	CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA	300
Db	841	CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA	900
Qу	301	CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG	360
Db	901	CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG	960
Qу	361	CCGTCCTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGC	420
Db	961	CCGTCCTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGC	1020
Qу	421	ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA	480
Db	1021	ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA	1080
QУ	481	AGGAGCCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCC	540
Db	1081		1140
Qy	541	GGGAGCAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGG	600
Db	1141	GGGAGCAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGG	1200
QУ	601	TACTGAGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCC	660
Db	1201	TACTGAGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCC	1260
QУ	661	ACGTGCGCCGCGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGGTG	720
Db	1261	ACGTGCGCCGGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGGTG	1320
Qу	721	ACGGCCGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCT	780
Db	1321	ATGGCGCTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCT	1380
QУ	781	TTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGG	840
Db	1381	TTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGG	1440
Qу	841	ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGG	900
Db	1441	ACGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGCTGG	1500
Qy	901	TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG	960
Db	1501	TGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGG	1560
Qy	961	CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA	1020
Db	1561	CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA	1620
QУ	1021	TCTTTAAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGG	1080
Db	1621	TCTTTAAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGG	1680

```
1081 CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1140
Qy
             1681 CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC 1740
Db
        1141 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
Qy
             1741 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCCAGTAACTTCCGGAGATGCTGGTGG 1800
Db
        1201 TCCTGTAGCAGGCTGGACACTTATTTCAAGAGTGATTCTAATTGGCTGGACTCAGAGGAA 1260
Qу
             1801 TCCTGTAGCA-GCTGGACACTTATTTCAAGAGTGATTCTAATTGGCTGGACTCAGAGGAA 1859
Db
        1261 ACCCTGCAG 1269
Qу
             111111111
Db
        1860 ACCCTGCAG 1868
RESULT 6
AAV21640
TD
    AAV21640 standard; cDNA; 1098 BP.
XX
AC
    AAV21640;
XX
    08-JUL-1998 (first entry)
DT
XX
DE
    Pig H transferase encoding cDNA.
XX
KW
     Pig; H transferase; chimeric; glycosyltransferase; gene therapy;
KW
    transplantation; ss.
XX
OS
    Sus scrofa.
XX
FH
    Key
                   Location/Qualifiers
    CDS
FT
                   1. .1098
FT
                   /*tag= a
FT
                   /product= "H transferase"
XX
PN
    WO9805768-A1.
XX
PD
    12-FEB-1998.
XX
PF
    01-AUG-1997;
                  97WO-AU000492.
XX
PR
    02-AUG-1996;
                  96AU-00001402.
PR
    21-AUG-1996;
                  96US-0024279P.
XX
PA
    (AUST-) AUSTIN RES INST.
XX
PΙ
    Mckenzie IFC, Sandrin MS;
XX
DR
    WPI; 1998-159170/14.
DR
    P-PSDB; AAW53102.
XX
PT
    Nucleic acids encoding chimeric glycosyltransferases - used for altering
PT
    carbohydrate levels on the surface of cells, useful in gene therapy and
PT
    transplantation.
XX
PS
    Example 3; Fig 7; 51pp; English.
XX
CC
    The present sequence encodes pig H transferase used in an example of the
    present invention. The present invention describes nucleic acids (NA)
CC
```

```
encoding a chimeric glycosyltransferase. The NAs comprise a catalytic
 CC
 CC
    domain of a first glycosyltransferase (GT) and a localisation signal of a
 CC
    second GT, whereby when the NA is expressed in a cell and where the
 CC
    chimeric enzyme is located in an area of the cell where it is able to
    compete for substrate with a second GT, resulting in reduced levels of a
 CC
    product from the second GT. The NAs can be used to produce cells and
 CC
 CC
    organs with desired glycosylation patterns. Products and methods of the
    present invention can be used to reduce the levels of undesirable
 CC
 CC
    epitopes in cells, tissues or organs which may be used in transplantation
 CC
    or gene therapy
 XX
    Sequence 1098 BP; 181 A; 367 C; 312 G; 238 T; 0 U; 0 Other;
 SO
  Query Match
                     86.3%; Score 1094.8; DB 2;
                                             Length 1098;
  Best Local Similarity
                     99.8%; Pred. No. 1.2e-244;
  Matches 1096; Conservative
                           0; Mismatches
                                            Indels
                                                              0;
                                                       Gaps
          9 ATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTGTTTTAGCA 68
Qy
            Dh
          1 ATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTGTTTTAGCA 60
         69 GCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACCTGCTGGCC 128
. Qy
            61 GCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACCTGCTGGCC 120
Db
        129 CTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGGCGGGCACG 188
Qу
            121 CTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGGCGGGCACG 180
Db
        189 CCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTTCCGGGACC 248
Qy
            181 CCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTTCCGGGACC 240
Db
        249 TGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACGCTGCTG 308
Qy
            241 TGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACGCTGCTG 300
Db
        309 GCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCCGTCCTG 368
Qy
           301 GCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCCGTCCTG 360
Db
        369 GCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCCGAGGTAGACAGGCACGCTCCT 428
Qy
           361 GCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCCGAGGTAGACAGGCACGCTCCT 420
Db
Qy
        429 TGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAGGAGCCC 488
           421 TGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAGGAGCCC 480
Db
        489 TGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCCGGGAGCAG 548
Qy
           Db
        481 TGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCCGGGAGCAG 540
        549 ATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGGTACTGAGT 608
Qy
           541 ATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGGTACTGAGT 600
Db
        609 CAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCCACGTGCGC 668
Qy
           601 CAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCCACGTGCGC 660
Db
```

```
Qy
         Db
       729 TACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTTGTGGTC 788
Qу
         721 TACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTTGTGGTC 780
Db
       789 ACCAGCAACGGCATGGAGTGCCCGGAAGAACATCGACACCTCCCGGGGGGACGTGATC 848
Qу
         781 ACCAGCAACGGCATGGAGTGCTGCCGGAAGAACATCGACACCTCCCGGGGGGACGTGATC 840
Db
Qy
      849 TTTGCTGGCGATGGGCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGCTGGTGCAGTGC 908
         841 TTTGCTGGCGATGGGCGGAGGCCGCCCCGCCAGGGACTTTGCGCTGCTGCTGCAGTGC 900
Db
      Qу
         Db
      969 GATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGATCTTTAAA 1028
Qy
         961 GATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGATCTTTAAA 1020
Db
      1029 CCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTCCAG 1088
Qу
         Db
      1021 CCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTCCAG 1080
Qу
      1089 ATGTTGGCTGGGCCTTGA 1106
         111111111111111111
Db
      1081 ATGTTGGCTGGGCCTTGA 1098
RESULT 7
ID
   AAQ13332 standard; DNA; 8174 BP.
XX
AC
   AAQ13332;
XX
DT
   25-MAR-2003
           (revised)
DT
   07-NOV-1991
           (first entry)
XX
DE
   GDP-Fuc:beta-D-galactoside alpha(1,2)-fucosyltransferase gene.
XX
KW
   Glycosyltransferase.
XX
os
   Homo sapiens.
XX
FH
   Key
             Location/Qualifiers
FT
   CDS
             4686. .5783
FT
             /*tag= a
XX
PN
   WO9112340-A.
XX
PD
   22-AUG-1991.
XX
PF
   14-FEB-1990;
             90US-00479858.
XX
PR
   14-FEB-1990;
            90US-00479858.
PR
   14-FEB-1990;
             90US-00480133.
PR
   12-DEC-1990;
             90US-00627621.
```

```
XX
PA
    (UNMI ) UNIV MICHIGAN.
XX
PΤ
    Lowe JB;
XX
DR
    WPI; 1991-267151/36.
DR
    P-PSDB; AAR13751.
XX
    Isolation of gene conveying post-translational characteristic - e.g. the
PT
    presence of soluble or membrane bound oligo or polysaccharide or
PT
PT
    glycosyltransferase.
XX
    Disclosure; Fig 3; 155pp; English.
PS
XX
    The DNA encodes a protein sequence capable of functioning as a GDP-
CC
    Fuc: [beta-D-Gal alpha(1,2) - fucosyltransferase. The sequence coded by
CC
    nucleotides 4782 - 5780 represents the functional protein. The enzyme
CC
CC
    produced by the DNA sequence can be used in enzymatic fucosylation of
    chain-terminating galactose residues on lactose- amine or neolacto type
CC
CC
    beta-D-galactoside to alpha-2-L-fucose residues. See also AAQ13330-
    Q13333. (Updated on 25-MAR-2003 to correct PA field.)
CC
XX
SO
    Sequence 8174 BP; 1628 A; 2229 C; 2322 G; 1995 T; 0 U; 0 Other;
 Query Match
                     63.7%;
                           Score 808.6; DB 2;
                                            Length 8174;
 Best Local Similarity
                    79.6%;
                           Pred. No. 7.7e-178;
 Matches 993; Conservative
                          0; Mismatches 249;
                                            Indels
                                                              3;
Qу
         1 CTCGAGCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTG 60
             Db
       4678 CTGCAGCCATGTGGCTCCGGAGCCATCGTCAGCTCTGCCTGGCCTTCCTGCTAGTCTGTG 4737
         61 TTTTAGCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACC 120
Qу
             4738 TCCTCTCTGTAATCTTCTTCCTCCATATCCATCAAGACAGCTTTCCACATGGCCTAGGCC 4797
Db
        121 TGCTGGCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGG 180
Qу
           11 1 111111111111
                               Db
       181 CGGGCACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTT 240
Qу
           Db
       4858 CGGGTACTGCGATGGGCCCCAACGCCTCCTCTTCCTGTCCCCAGCACCCTGCTTCCCTCT 4917
       241 CCGGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCA 300
Qу
           Db
       4918 CCGGCACCTGGACTGTCTACCCCAATGGCCGGTTTGGTAATCAGATGGGACAGTATGCCA 4977
        301 CGCTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACG 360
Qу
           Db
       361 CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCCGAGGTAGACAGGC 420
Qу
           5038 CCGCCCTGGCCCGGTATTCCGCATCACCCTGCCCGTGCTGGCCCCAGAAGTGGACAGCC 5097
Db
       421 ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA 480
Qy
            Db
       5098 GCACGCCGTGGCGGAGCTGCAGCTTCACGACTGGATGTCGGAGGAGTACGCGGACTTGA 5157
Qy
       481 AGGAGCCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCC 540
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      Qу
          Db
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Db
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XX
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XX
   19-JUN-1997 (first entry)
DT
XX
DE
   Human alpha(1,2)-fucosyltransferase DNA.
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XX
KW
    Alpha(1,2)-fucosyltransferase; glycosylation; oligosaccharide;
KW
    blood group H; ss.
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XX
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XX
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PA
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XX
PΙ
    Lowe JB, Legault DJ;
XX
DR
    WPI; 1997-192897/17.
DR
    P-PSDB; AAW13640.
XX
PT
    New recombinant fucosyl:transferase proteins - useful for modifying cell
PT
    surface oligosaccharide structures.
XX
PS
    Example 1; Page 274-279; 329pp; English.
XX
    A DNA sequence (AAT61677) codes for human GDP-Fuc:beta-D- galactoside
CC
    alpha(1,2)-fucosyltransferase (AAW13640), an enzyme involved in the
CC
    expression of type I and II blood group H structures. It was obtd. by
CC
    transfecting mouse L cells with DNA derived from human A431 cells, and
CC
CC
    selection of transfectants that expressed the H antigen by using anti-H
CC
    antibody in a panning procedure. The DNA can be used to construct animal
CC
    cell lines with specific capabilities with respect to post-translational
CC
    modification of the oligosaccharides of expressed proteins or lipids, or
CC
    to produce recombinant enzyme for use in oligosaccharide prodn
XX
SQ
    Sequence 8174 BP; 1628 A; 2229 C; 2322 G; 1995 T; 0 U; 0 Other;
 Query Match
                       63.7%; Score 808.6; DB 2;
                                                 Length 8174;
 Best Local Similarity
                       79.6%; Pred. No. 7.7e-178;
 Matches 993; Conservative
                             0; Mismatches 249;
                                                 Indels
                                                              Gaps
                                                                     3;
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Qу
              1111 111 11
Db
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                                  Db
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Qу	361	CCGTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCCGAGGTAGACAGGC	420
Db	5038	CCGCCCTGGCCCCGGTATTCCGCATCACCCTGCCCGTGCTGGCCCCAGAAGTGGACAGCC	509
Qу	421	ACGCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAA	480
Db	5098		515
Qу	481	AGGAGCCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCC	540
Db	5158		521
Qy	541	GGGAGCAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGG	600
Db	5218		527
Qy	601	TACTGAGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCC	660
Db	5278		5337
Qу	661	ACGTGCGCCGCGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGGTG	720
Db	5338		5397
Qу	721	ACGGCCGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCT	780
Db	5398	ACAGCGCCTACCTCCGGCAGGCCATGGACTGGTTCCGGGCACGGCACGAAGCCCCCGTTT	5457
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Db	5518		5577
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Db	5578		5637
Qy	961	CTGGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGA	1020
Db	5638		5697
Qy	1021	TCTTTAAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGG	1080
Db	5698	TCTTTAAGCCGGAGGGGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTC	5757
Qy	1081	CACTCCAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTC	1140
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1141 AACCCAGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGG 1200
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AC
     ACN37237;
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DT
     18-NOV-2004 (first entry)
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DE
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KW
     periodontal disease; polymorphism; ds; human; gene; SNP;
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     single nucleotide polymorphism.
XX
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     22-OCT-2003; 2003WO-IB004669.
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        23-OCT-2002; 2002JP-00308634.
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        (KAMO/) KAMOI K.
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        Kamoi K,
                        Suzuki A,
                                      Numabe Y, Ji G, Muramatsu M,
                                                                                            Baba M;
XX
DR
        WPI; 2004-400678/37.
XX
        Single nucleotide polymorphisms associated with periodontal disease for
PT
        examination and assessment of susceptibility to periodontal disease.
PT
XX
PS
        Claim 9; SEQ ID NO 147; Opp; Japanese.
XX
CC
        The invention relates to a novel method for examination of periodontal
        disease in which genetic polymorphisms are detected in one or more of 51
CC
        genes. The method is useful for examination, diagnosis and assessment of
CC
CC
        periodontal disease or risk of periodontal disease and the risk of its
        progression to severe, aggressive and chronic periodontal disease. The
CC
        present sequence represents a polymorphic gene of the invention
CC
XX
        Sequence 20001 BP; 4519 A; 5818 C; 5572 G; 4092 T; 0 U; 0 Other;
SQ
   Query Match
                                         63.7%; Score 808.6; DB 13;
                                                                                        Length 20001;
   Best Local Similarity
                                        79.6%; Pred. No. 9.6e-178;
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                                                   0; Mismatches 249;
                                                                                      Indels
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                      11 1 11111111111
                                                           Db
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                      12552 CCGGCACCTGGACTGTCTACCCCAATGGCCGGTTTGGTAATCAGATGGGACAGTATGCCA 12493
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                      12432 CCGCCCTGGCCCGGTATTCCGCATCACCCTGCCCGTGCTGGCCCCAGAAGTGGACAGCC 12373
Db
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Qy
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Qy
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Qу
         1 111 11111 1111 11
                       Db
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   26-JUL-1994
           (first entry)
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DNA encoding a glycosyltransferase.
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XX
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XX
FH
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    20-JUL-1993;
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XX
PR
    20-JUL-1992;
                  92US-00914281.
XX
PΑ
    (UNMI ) UNIV MICHIGAN.
XX
PΙ
    Lowe JB;
XX
DR
    WPI; 1994-048874/06.
DR
    P-PSDB; AAR45936.
XX
PТ
    DNA fragment encoding a glycosyltransferase - can be used for in vitro
    reactions to modify cell surface oligosaccharide(s) e.g. blood gp.
PT
    determinants, to protect against transplant rejection.
PΤ
XX
PS
    Disclosure; Fig 3; 249pp; English.
XX
    The sequence is that encoding human glycosyl transferase. The enzyme
CC
    produced by the DNA may be non glycosylated. This prevents premature loss
CC
CC
    of enzyme activity. It can also be used in in vitro reactions to modify
    cell surface oligosaccharide mols. e.g. blood group determinants. See
CC
CC
    also AAQ56905-12. (Updated on 25-MAR-2003 to correct PN field.)
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                                                             Gaps
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Qу
              1111 111 11
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KW
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KW
KW
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     29-APR-1997.
XX
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     11-JUL-1994;
XX
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     11-JUL-1994;
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XX
PΙ
     Falk P, Gordon JI;
XX
DR
     WPI; 1997-258275/23.
DR
     P-PSDB; AAW23805.
XX
PT
     Animal model for Helicobacter pylori infection - comprising transgenic
PΤ
     mouse expressing human enzyme promoting intestinal adhesion.
XX
PS
     Example 1; Col 17-20; 24pp; English.
XX
CC
     A claimed transgenic mouse expresses, in its intestinal epithelial cells,
CC
     the enzyme human GDP-L-fucose:beta-D-galactoside 2-alpha-L-
CC
     fucosyltransferase (also called alpha 1,2 FT) or human GDP-L-fucose: beta
CC
     -D-N-acetylglucosamide 3/4-alpha-L-fucosyltransferase (also called alpha
CC
     1,3/4 FT). The enzyme is expressed under the control of a gut epithelial
CC
     cell-specific promoter and Helicobacter pylori adheres to the transgenic
CC
     cells. The transgenic mouse and intestinal epithelial cells from it are
CC
     useful as models for screening compounds for the ability to inhibit
CC
     adhesion of H. pylori to gut epithelial cells. The present sequence
CC
     encodes human alpha 1,2 FT and was published by Larsen et al.,
```

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   Proc.Natl.Acad.Sci.USA, 87: 6674-6678 (1990)
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    P-PSDB; AAE29226.
DR
XX
PT
    Mammalian cells, useful for producing animal tissues with carbohydrate
    antigens that are compatible for transplantation into human patients.
PT
XX
PS
    Disclosure; Page 35-36; 71pp; English.
XX
CC
    The invention relates to animal tissues with carbohydrate antigens that
CC
    are compatible for transplantation into human patients. The mammalian
    cell is inactivated homozygously for expression of alpha(1,3)galactosyl-
CC
    transferase (alpha1,3GT) gene and comprises a transgene for alpha(1,2)-
CC
    fucosyltransferase (alpha1,2FT). It is useful for producing animal tissue
CC
    with carbohydrate antigens that are compatible for transplantation into
CC
    human patients. The present sequence is human alpha1,2FT cDNA
CC
XX
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  Best Local Similarity
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            Db
       786 GTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGGACGTG 845
Qу
         881 GTCACCAGCAACGGCATGGAGTGTGTAAAGAAAACATCGACACCTCCCAGGGCGATGTG 940
Db
       846 ATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGGTGCAG 905
Qу
         1 11111111111111 | 111111 | 111
                                  1 1111111 1111
       941 ACGTTTGCTGGCGATGGACAGGAGGCTACACCGTGGAAAGACTTTGCCCTGCTCACACAG 1000
Db
       0v
         Db
      966 GGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGATCTTT 1025
Qу
         \Box
                                        1111111111111
      1061 GGAGACACTGTCTACCTGGCCAACTTCACCCTGCCAGACTCTGAGTTCCTGAAGATCTTT 1120
Db
      1026 AAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTC 1085
Qу
         1121 AAGCCGGAGGCGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTC 1180
Db
      1086 CAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTCAACCC 1145
Qу
             \perp
                                  11
                                      111
Db
      1181 TGGACATTGGCTAAGCCTTGA--GAGCCAGGGAGACTTTCTGAAGTAGCCTGATCTTTCT 1238
      1146 AGGGCCAGCGTTATGGGTCTCCGGAAGCCCGAGTAACTTCCGGAGATGCTGGTGGTCCTG 1205
Qy
         1239 AGAGCCAGCAGTACGTGGCTTCAGAGGCCTG-GCATCTTCTGGAGAAGCTTGTGGTGTTC 1297
Db
      1206 TAGCAG--GCTGGACACTTATTTCAAGAGTGATTCTAATTGG 1245
Qу
                      - 1
      1298 CTGAAGCAAATGGGTGCCCGTATCCAGAGTGATTCTAGTTGG 1339
Db
RESULT 13
AAT12238
ID
   AAT12238 standard; cDNA to mRNA; 1174 BP.
XX
AC
   AAT12238;
XX
DT
   08-APR-1996 (first entry)
XX
DΕ
   Human H-transferase cDNA.
XX
KW
   H-transferase; xenograft hyperacute rejection; transplantation;
```

```
KW
    glycosyltransferase; galactose alpha(1,3) galactose; ds.
XX
os
    Homo sapiens.
XX
FH
    Key
                   Location/Qualifiers
FT
    CDS
                  15. .1112
FΤ
                   /*tag= a
XX
PN
    WO9534202-A1.
XX
PD
    21-DEC-1995.
XX
PF
    14-JUN-1995;
                 95WO-US007554.
XX
PR .
    15-JUN-1994;
                 94US-00260201.
    21-JUL-1994; 94US-00278282.
PR
XX
PΑ
    (ALEX-) ALEXION PHARM INC.
PA
    (AUST-) AUSTIN RES INST.
XX
PΙ
    Sandrin MS, Fodor WL, Rother RP, Squinto SP, Mckenzie IFC;
XX
DR
    WPI; 1996-049326/05.
DR
    P-PSDB; AAR90572.
XX
PT
    Redn. of rejection of xenogeneic cells following transplantation - by
    introducing a vector expressing fucosyl:transferase into the cells.
PT
XX
PS
    Example 1; Page 45-47; 69pp; English.
XX
    A cDNA clone (AAT12238) encoding human H-transferase (AAR90572) was obtd.
CC
    from cDNA prepd. from human epidermoid carcinoma cells (ATCC CRL 155 A-
CC
    431) by PCR using primers (AAT12240-41) based on H- transferase cDNA 5'
CC
CC
    and 3' untranslated regions. The cDNA can be incorporated into vector
    APEX-1 (AAT12239) for expression in xenogeneic organs, tissues and cells.
CC
    This results in decreased expression of the non-human antigen galactose
CC
CC
    alpha(1,3) galactose on the surface of the organs etc. so that hyperacute
CC
    rejection is reduced upon transplantation to humans
XX
SQ
    Sequence 1174 BP; 202 A; 388 C; 328 G; 256 T; 0 U; 0 Other;
 Query Match
                      62.6%; Score 794.2; DB 2;
                                                Length 1174;
 Best Local Similarity 80.7%; Pred. No. 1.1e-174;
 Matches 940; Conservative
                            0; Mismatches 223;
                                                Indels
          6 GCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTGTTTTA 65
Qу
            12 GCCATGTGGCTCCGGAGCCATCGTCAGCTCTGCCTGGCCTTCCTGCTAGTCTGTGTCCTC 71
Db
         66 GCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACCTGCTG 125
Qy
             72 TCTGTAATCTTCCTCCATATCCATCAAGACAGCTTTCCACATGGCCTAGGCCTGTCG 131
Db
        126 GCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGGCGGGC 185
Qу
             Db
        Qу
        186 ACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTTCCGGG 245
              Db
        192 ACTGCGATGGGCCCCAACGCCTCTCTTCCTGTCCCCAGCACCCTGCTTCCCTCTCCGGC 251
```

Qу	246	ACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACGCTG	305
Db	252		311
Qу	306	CTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCCGTC	365
Db	312		371
QУ	366	CTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGCACGCT	425
Db	372	CTGGCCCCGGTATTCCGCATCACCCTGCCCGTGCTGGCCCCAGAAGTGGACAGCCGCACG	431
Qу	426	CCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAGGAG	485
Db	432	CCGTGGCGGAGCTGCAGCTTCACGACTGGATGTCGGAGGAGTACGCGGACTTGAGAGAT	491
Qу	486	CCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCCGGGAG	545
Db	492	CCTTTCCTGAAGCTCTCTGGCTTCCCCTGCTCTTGGACTTTCTTCCACCATCTCCGGGAA	551
Qу	546	CAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGGTACTG	605
Db	552	CAGATCCGCAGAGAGTTCACCCTGCACGACCACCTTCGGGAAGAGGCGCAGAGTGTGCTG	611
Qу	606	AGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCCACGTG	665
Db	612	GGTCAGCTCCGCCTGGGCCGCACAGGGGACCGCCCGCGCACCTTTGTCGGCGTCCACGTG	671
Qу	. 666	CGCCGCGGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGGTG	725
Db		CGCCGTGGGGACTATCTGCAGGTTATGCCTCAGCGCTGGAAGGGTGTGGTGGGCGACAGC	
Qу		CGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTTGTG	
Db		GCCTACCTCCGGCAGGCCATGGACTGGTTCCGGGCACGGCACGAAGCCCCCGTTTTCGTG	
Qу		GTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGGACGTG	
Db		GTCACCAGCAACGGCATGGAGTGGTGTAAAGAAAACATCGACACCTCCCAGGGCGATGTG	
Qу		ATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGCTGCAG	
Db		ACGTTTGCTGGCGATGGACAGGGGCTACACCGTGGAAAGACTTTGCCCTGCTCACACAG	
Qу		TGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGGCTGG	
Db		TGCAACCACCATTATGACCATTGGCACCTTCGGCTTCTGGGCTGCCTACCTGGCTGG	
ДÀ		GGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGATCTTT	
Db		GGAGACACTGTCTACCTGGCCAACTTCACCCTGCCAGACTCTGAGTTCCTGAAGATCTTT	
Qу		AAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTC	
Db		AAGCCGGAGGCGGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTC	
ΟУ		CAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTCAACCC	
Db		TGGACATTGGCTAAGCCTTGAGAGCCAGGGAGACTTTCTGAAGTAGCCTGATCTTTCT	1149
Qу	1146	AGGGCCAGCGTTATGGGTCTCCGGA 1170	

Db 1150 AGAGCCAGCAGTACGTGGCTTCAGA 1174 RESULT 14 AAA53820

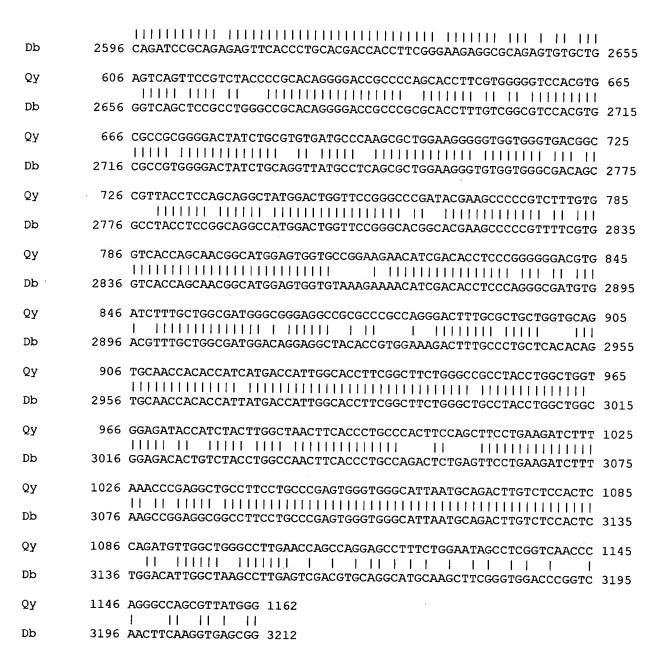
AAA53820 standard; cDNA to mRNA; 1174 BP. XX AC AAA53820; XX DT 03-JAN-2001 (first entry) XX DE Human H-transferase coding sequence. XX mesenchymal stem cell; stem cell; H-tranferase; glycosyltransferase; KW transplantation; xenotransplantation; transgenic animal; tissue injury; KW bone; joint; tendon; ligament; trauma; tumour infection; KW muscular dystrophy; osteoarthritis; rheumatoid arthritis; ds. KW XX os Homo sapiens. XX FHKey Location/Qualifiers FTCDS 15. .1112 FΤ /*tag= a/product= "H-transferase" FTXX PN W0200049136-A1. XX PD24-AUG-2000. XX PF 16-FEB-2000; 2000WO-US003963. XX PR 17-FEB-1999; 99US-0120452P. XX PA (USSU) US SURGICAL. XX PΙ Gruskin EA, Tawil N, Geis D; XX DR WPI; 2000-533106/48. DR P-PSDB; AAY97279. XX Isolated mesenchymal stem cell comprising nucleic acid encoding an immune PTPTsystem suppressor polypeptide, useful for treatment of tissue injuries and/or tissue disorders such as bone and joint fractures. PT XX PS Example 4; Page 40-41; 60pp; English. XX CC New methods are described for treating a tissue in need of repair or CC reconstruction comprising administering a composition comprising a CC mesenchymal stem cell where the stem cell differentiates into a cell CC which is normally indigenous to the tissue. The mesenchymal stem cell CC does not trigger an immune response in the recipient due to it being CC transfected with a vector comprising nucleic acid which encodes for an immune system repressor polypeptide. The mesenchymal stem cell may be CC removed from the recepient; transfected and then replaced or derived from CC a donor transgenic animal. The transfected mesenchymal stem cells are CC CC useful for treatment of tissue injuries and/or tissue disorders such as CC bone and joint fractures, bone defects resulting from trauma, tumour

CC infection, tendon and ligament defects, congenital defects, muscular dystrophy, osteoarthritis, and rheumatoid arthritis. The use of the CC CC genetically engineered cells is advantageous because the need for

```
allogenic human donors to provide non-immunogenic cells is eliminated.
  CC
            Suitable proteins or enzymes that when expressed in xenogenic cells are
 CC
            capable of reducing the expression of xenogenic antigens and thus reduce
 CC
           or inhibit rejection of the xenogenic cell when transplanted include
            glycosyltransferases such as human alpha-1,2-fucosyltransferase (H-
 CC
            transferase) and human lysosomal alpha galactosidase
 CC
 XX
           Sequence 1174 BP; 202 A; 388 C; 328 G; 256 T; 0 U; 0 Other;
 SO
     Query Match
                                                       62.6%; Score 794.2; DB 3;
                                                                                                                    Length 1174;
     Best Local Similarity
                                                       80.7%; Pred. No. 1.1e-174;
     Matches 940; Conservative
                                                                     0; Mismatches 223;
                                                                                                                    Indels
                                                                                                                                                  Gaps
                                                                                                                                                                  1:
                          6 GCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTGTTTTA 65
 Qy
                               12 GCCATGTGGCTCCGGAGCCATCGTCAGCTCTGCCTGGCCTTCCTGCTAGTCTGTGTCCTC 71
 Db
                        66 GCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACCTGCTG 125
 Qy
                                 1 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 
                                                                                                                          1111 111 1111
                        72 TCTGTAATCTTCCTCCATATCCATCAAGACAGCTTTCCACATGGCCTAGGCCTGTCG 131
 Db
                      126 GCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGGCGGGC 185
 Qy
                                   1111111111111
                                                                       Db
                     186 ACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTTCCGGG 245
 Qy
                                                    192 ACTGCGATGGGCCCCAACGCCTCCTCTTCCTGTCCCCAGCACCCTGCTTCCCTCTCCGGC 251
 Db
                     246 ACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACGCTG 305
Qу
                              111 | 111 | 1 | 111 | 1 | 111 | 1 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 1
                     252 ACCTGGACTGTCTACCCCAATGGCCGGTTTGGTAATCAGATGGGACAGTATGCCACGCTG 311
Db
                     306 CTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCCGTC 365
Qy
                              Db
                     366 CTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGCACGCT 425
Qy
                              372 CTGGCCCCGGTATTCCGCATCACCCTGCCCGTGCTGGCCCCAGAAGTGGACAGCCGCACG 431
Db
                     426 CCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAGGAG 485
Qу
                             432 CCGTGGCGGAGCTGCAGCTTCACGACTGGATGTCGGAGGAGTACGCGGACTTGAGAGAT 491
Db
                     486 CCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCCGGGAG 545
Qу
                             492 CCTTTCCTGAAGCTCTCTGGCTTCCCCTGCTCTTGGACTTTCTTCCACCATCTCCGGGAA 551
Db
                    546 CAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGGTACTG 605
Qу
                              552 CAGATCCGCAGAGAGTTCACCCTGCACGACCACCTTCGGGAAGAGGCGCAGAGTGTGCTG 611
Db
                     606 AGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCCACGTG 665
Qy
                                                                612 GGTCAGCTCCGCCTGGGCCGCACAGGGGACCGCCGCGCACCTTTGTCGGCGTCCACGTG 671
Db
                    Qу
                             672 CGCCGTGGGGACTATCTGCAGGTTATGCCTCAGCGCTGGAAGGGTGTGGTGGGCGACAGC 731
Db
```

```
726 CGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTTGTG 785
Qу
             Db
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Qу
           Db
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       846 ATCTTTGCTGGCGATGGGCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGCTGCTGCAG 905
Qу
            852 ACGTTTGCTGGCGATGGACAGGAGGCTACACCGTGGAAAGACTTTGCCCTGCTCACACAG 911
Db
       Qу
          Db
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Qу
          11111 11 1111 1111 1111 11111111111
                                        1111111111111111
       972 GGAGACACTGTCTACCTGGCCAACTTCACCCTGCCAGACTCTGAGGTTCCTGAAGATCTTT 1031
Db
      1026 AAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTC 1085
Qy
          Db
      1032 AAGCCGGAGGCGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTC 1091
      1086 CAGATGTTGGCTGGGCCTTGAACCAGCCAGGAGCCTTTCTGGAATAGCCTCGGTCAACCC 1145
Qу
                            1111111
            \Pi
                                          \perp \mid \mid \mid \mid \mid
                                               1 11
      1092 TGGACATTGGCTAAGCCTTGA--GAGCCAGGGAGACTTTCTGAAGTAGCCTGATCTTTCT 1149.
Db
      1146 AGGGCCAGCGTTATGGGTCTCCGGA 1170
Qу
          Db
      1150 AGAGCCAGCAGTACGTGGCTTCAGA 1174
RESULT 15
   AAT63575 standard; DNA; 3791 BP.
XX
AC
   AAT63575:
XX
DT
   01-JUL-1997 (first entry)
XX
DE
   Chicken beta-actin promoter.
XX
KW
   Xenotransplantation; organ transplant; transgenic animal; transgenic pig;
KW
   transgenic mouse; antibody mediated rejection; hyperacute rejection;
KW
   antigen reducing enzyme; alpha(1,2)fucosyltransferase; beta-actin;
KW
   promoter; ss.
XX
os
   Gallus sp.
XX
PN
   WO9712035-A2.
XX
PD
   03-APR-1997.
XX
PF
   23-SEP-1996;
               96WO-US015255.
XX
PR
   27-SEP-1995;
               95US-0004461P.
   03-JUL-1996;
PR
              96US-00675773.
XX
PA
   (NEXT-) NEXTRAN.
XX
```

```
PΙ
     Diamond LE,
               Logan JS,
                         Byrne GW,
                                  Sharma A;
XX
DR
    WPI; 1997-225881/20.
XX
PT
    Transgenic animals expressing antigen reducing enzyme and complement
PT
    inhibitor - used for production of materials suitable for human
PT
    transplantation having a reduced risk of rejection.
XX
PS
    Example 6.1; Page 112-115; 146pp; English.
XX
CC
    The chicken beta-actin promoter (AAT63575) and the H2Kb gene promoter
    (AAT63576) can be utilised in novel vectors for the expression of gal
CC
    epitope-reducing enzymes (e.g. human alpha(1,2)fucosyltransferase) and
CC
    complement inhibitors (e.g. CD59) on the endothelial cells of transgenic
CC
    animals such as pigs and mice. The transgenic animals are used for the
CC
    prodn. of materials suitable for transplantation to humans, such
CC
    materials being less likely to produce an antibody-mediated rejection
CC
XX
    Sequence 3791 BP; 825 A; 1092 C; 1036 G; 838 T; 0 U; 0 Other;
SQ
  Query Match
                      62.4%; Score 792.2; DB 2;
                                              Length 3791;
  Best Local Similarity
                      80.3%;
                            Pred. No. 4.2e-174;
 Matches 929; Conservative
                            0; Mismatches 228;
                                              Indels
                                                                 0;
          6 GCCATGTGGGTCCCCAGCCGCCACCTCTGTCTGACCTTCCTGCTAGTCTGTGTTTTA 65
Qу
            2056 GCCATGTGGCTCCGGAGCCATCGTCAGCTCTGCCTGGCCTTCCTGCTAGTCTGTGTCCTC 2115
Db
         66 GCAGCAATTTTCTTCCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACCTGCTG 125
Qу
            2116 TCTGTAATCTTCTTCCTCCATATCCATCAAGACAGCTTTCCACATGGCCTAGGCCTGTCG 2175
Db
        126 GCCCTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGGCGGGC 185
Qy
             11111111111
                            1 1111 11 1 1 11 1111111 1111111 1111
       Db
        186 ACGCCGGTACACCCCAACGCCTCCGATTCCTGTCCCAAGCATCCTGCCTCCTTTTCCGGG 245
Qу
                    2236 ACTGCGATGGGCCCCAACGCCTCTTCCTGTCCCCAGCACCCTGCTTCCCTCTCCGGC 2295
Db
        246 ACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACGCTG 305
Qу
           18818888 | 1888 | 18888 | 188888 | 1888
       2296 ACCTGGACTGTCTACCCCAATGGCCGGTTTGGTAATCAGATGGGACAGTATGCCACGCTG 2355
Db
        306 CTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCCGTC 365
Qy
           Db
        366 CTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGCACGCT 425
Qу
            11111111 11 111111111111 11111 11 11111 11 11 11 11 11 11 11
       2416 CTGGCCCGGTATTCCGCATCACCCTGCCCGTGCTGGCCCCAGAAGTGGACAGCCGCACG 2475
Db
        426 CCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAGGAG 485
Qy
           2476 CCGTGGCGGAGCTGCAGCTTCACGACTGGATGTCGGAGGAGTACGCGGACTTGAGAGAT 2535
Db
        486 CCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCCGGGAG 545
Qу
                2536 CCTTTCCTGAAGCTCTCTGGCTTCCCCTGCTCTTGGACTTTCTTCCACCATCTCCGGGAA 2595
Db
        546 CAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGGTACTG 605
Qy
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Search completed: November 14, 2006, 05:04:31 Job time: 890 secs

SCORE 1.3 BuildDate: 12/06/2005

SCORE Search Results Details for Application 09 and Search Result us-09-844-268-12.rnpb

Score Home Page Retrieve Application List SCORE System Overview SCORE FAQ Comments / Suga

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start

Go Bac

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```

OM nucleic - nucleic search, using sw model

November 13, 2006, 21:00:25 ; Search time 1815 Seconds Run on:

(without alignments)

8591.190 Million cell updates/sec

US-09-844-268-12 Title:

Perfect score: 1269

1 ctcgagccatgtgggtcccc.....actcagaggaaaccctgcag 1269 Sequence:

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 18892170 segs, 6143817638 residues

Total number of hits satisfying chosen parameters:

Minimum DB seg length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_NA_Main:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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	5	806.8	63.6	3373	6	US-10-105-963-9	Sequence 9, Appli
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ALIGNMENTS

RESULT 1

US-09-844-268-12

[;] Sequence 12, Application US/09844268

[;] Patent No. US20020129395A1

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; GENERAL INFORMATION:
  APPLICANT: BOSWORTH, BRAD
  APPLICANT: VOGELI, PETER
  TITLE OF INVENTION: METHODS AND COMPOSITIONS TO IDENTIFY SWINE GENETICALLY
  TITLE OF INVENTION: RESISTANT TO F18 E. COLI ASSOCIATED DISEASES
  FILE REFERENCE: 21419/90368
  CURRENT APPLICATION NUMBER: US/09/844,268
  CURRENT FILING DATE: 2001-04-27
  PRIOR APPLICATION NUMBER: 09/443,766
  PRIOR FILING DATE: 1999-11-19
  NUMBER OF SEQ ID NOS: 13
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
   LENGTH: 1269
   TYPE: DNA
   ORGANISM: Porcine
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (9)..(1103)
US-09-844-268-12
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 Best Local Similarity 100.0%; Pred. No. 0;
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US-09-844-705-12

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- ; Patent No. US20020133836A1
- ; GENERAL INFORMATION:
- ; APPLICANT: BOSWORTH, BRAD
- ; APPLICANT: VOGELI, PETER
- ; TITLE OF INVENTION: METHODS AND COMPOSITIONS TO IDENTIFY SWINE GENETICALLY

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TITLE OF INVENTION: RESISTANT TO F18 E. COLI ASSOCIATED DISEASES
  FILE REFERENCE: 21419/90368
  CURRENT APPLICATION NUMBER: US/09/844,705
  CURRENT FILING DATE: 2001-04-27
  PRIOR APPLICATION NUMBER: 09/443,766
  PRIOR FILING DATE: 1999-11-19
  NUMBER OF SEQ ID NOS: 13
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 12
   LENGTH: 1269
   TYPE: DNA
   ORGANISM: Porcine
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (9)..(1103)
US-09-844-705-12
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US-09-051-034A-3

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- ; Patent No. US20010055584A1
- ; GENERAL INFORMATION:
- ; APPLICANT: MCKENZIE, IAN FARQUHAR CAMPBELL
- ; APPLICANT: SANDRIN, MAURO SERGIO
- ; TITLE OF INVENTION: IMPROVED NUCLEIC ACIDS ENCODING A CHIMERIC
- ; TITLE OF INVENTION: GLYCOSYLTRANSFERASE
- ; FILE REFERÈNCE: 30562.6USWO
- ; CURRENT APPLICATION NUMBER: US/09/051,034A
- ; CURRENT FILING DATE: 1998-03-31

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  PRIOR FILING DATE: 1997-08-01
  PRIOR APPLICATION NUMBER:
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  PRIOR FILING DATE: 1996-08-21
  PRIOR APPLICATION NUMBER: PO1402
  PRIOR FILING DATE: 1996-08-02
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   NAME/KEY: CDS
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; Sequence 5, Application US/09863475A
 Patent No. US20020102688A1
  GENERAL INFORMATION:
      APPLICANT: LOWE, JOHN B.
      TITLE OF INVENTION: METHODS AND PRODUCTS FOR THE SYNTHESIS
                    OF OLIGOSACCHARIDE STRUCTURES ON GLYCOPROTEINS,
                    GLYCOLIPIDS, OR AS FREE MOLECULES, AND FOR THE ISOLATION
                    OF CLONED GENETIC SEQUENCES THAT DETERMINE THESE STRUCTUR
      NUMBER OF SEQUENCES: 14
      CORRESPONDENCE ADDRESS:
         ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
         STREET: 1755 Jefferson Davis Highway, Fourth Floor
         CITY: Arlington
         STATE: Virginia
         COUNTRY: U.S.A.
         ZIP: 22202
      COMPUTER READABLE FORM:
         MEDIUM TYPE: Floppy disk
         COMPUTER: IBM PC compatible
         OPERATING SYSTEM: PC-DOS/MS-DOS
         SOFTWARE: PatentIn Release #1.0, Version #1.25
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CURRENT APPLICATION DATA:
          APPLICATION NUMBER: US/09/863,475A
          FILING DATE: 24-May-2001
          CLASSIFICATION:
       PRIOR APPLICATION DATA:
          APPLICATION NUMBER: 07/914,281
          FILING DATE: 20-JUL-1992
       ATTORNEY/AGENT INFORMATION:
          NAME: Lavalleye, Jean-Paul M. P.
          REGISTRATION NUMBER: 31,451
          REFERENCE/DOCKET NUMBER: 2363-060-55
       TELECOMMUNICATION INFORMATION:
          TELEPHONE: (703)521-4500
          TELEFAX: (703)486-2347
          TELEX: 248855 OPAT UR
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       SEQUENCE CHARACTERISTICS:
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          TYPE: nucleic acid
          STRANDEDNESS: unknown
          TOPOLOGY: unknown
      MOLECULE TYPE: DNA (genomic)
      ANTI-SENSE: NO
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US-09-863-475A-5
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 Best Local Similarity
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US-10-105-963-9

[;] Sequence 9, Application US/10105963

[;] Publication No. US20030068818A1

[;] GENERAL INFORMATION:

[;] APPLICANT: Geron Corporation

[;] APPLICANT: Denning, Chris

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APPLICANT: Clark, A. John
  APPLICANT: Schiff, J. Michael
  TITLE OF INVENTION: Animal Tissue with Carbohydrate Antigens Compatible for Human
  TITLE OF INVENTION: Transplantation and a Carbohydrate Determinant Selection Syste
  TITLE OF INVENTION: Recombination
  FILE REFERENCE: 731/002
  CURRENT APPLICATION NUMBER: US/10/105,963
  CURRENT FILING DATE: 2002-03-21
  PRIOR APPLICATION NUMBER: US 60/277,811
  PRIOR FILING DATE: 2001-03-21
  NUMBER OF SEQ ID NOS: 40
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
   LENGTH: 3373
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (104)..(1201)
   OTHER INFORMATION:
US-10-105-963-9
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                    63.6%; Score 806.8; DB 6;
                                           Length 3373;
 Best Local Similarity 79.7%; Pred. No. 1.5e-227;
 Matches 990; Conservative
                          0; Mismatches 247;
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US-11-219-419-9

- ; Sequence 9, Application US/11219419
- ; Publication No. US20060057719A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Geron Corporation
- ; APPLICANT: Denning, Chris
- ; APPLICANT: Clark, A. John
- ; APPLICANT: Schiff, J. Michael
- ; TITLE OF INVENTION: CARBOHYDRATE DETERMINANT SELECTION
- ; FILE REFERENCE: 139/003d

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CURRENT APPLICATION NUMBER: US/11/219,419
  CURRENT FILING DATE: 2005-09-02
  PRIOR APPLICATION NUMBER: US 60/277,811
  PRIOR FILING DATE: 2001-03-21
  PRIOR APPLICATION NUMBER: US 10/105,963
  PRIOR FILING DATE: 2002-03-21
  NUMBER OF SEQ ID NOS: 40
  SOFTWARE: PatentIn version 3.3
 SEQ ID NO 9
  LENGTH: 3373
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (104)..(1201)
US-11-219-419-9
 Query Match
                   63.6%; Score 806.8; DB 16; Length 3373;
 Best Local Similarity 79.7%; Pred. No. 1.5e-227;
 Matches 990; Conservative
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US-09-051-034A-1

- ; Sequence 1, Application US/09051034A
- ; Patent No. US20010055584A1
- ; GENERAL INFORMATION:
- ; APPLICANT: MCKENZIE, IAN FARQUHAR CAMPBELL
- ; APPLICANT: SANDRIN, MAURO SERGIO
- ; TITLE OF INVENTION: IMPROVED NUCLEIC ACIDS ENCODING A CHIMERIC
- ; TITLE OF INVENTION: GLYCOSYLTRANSFERASE
- ; FILE REFERENCE: 30562.6USWO
- ; CURRENT APPLICATION NUMBER: US/09/051,034A
- ; CURRENT FILING DATE: 1998-03-31
- ; PRIOR APPLICATION NUMBER: PCT/AU97/00492
- ; PRIOR FILING DATE: 1997-08-01
- ; PRIOR APPLICATION NUMBER: 60/024,279
- ; PRIOR FILING DATE: 1996-08-21

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     PRIOR FILING DATE: 1996-08-02
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      LENGTH: 1043
       TYPE: DNA
      ORGANISM: Sus Domesticus
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      NAME/KEY: CDS
      LOCATION: (9)..(1031)
 US-09-051-034A-1
   Query Match
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    Best Local Similarity 71.8%; Pred. No. 2e-123;
   Matches 610; Conservative
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; Sequence 5, Application US/09254077A
; Publication No. US20020031494A1
; GENERAL INFORMATION:
  APPLICANT: SANDRIN, MAURO S.
  APPLICANT: MCKENZIE, IAN C. F.
  TITLE OF INVENTION: NUCLEIC ACIDS FOR REDUCING CARBOHYDRATE EPITOPES
  FILE REFERENCE: 30562.5USWO
  CURRENT APPLICATION NUMBER: US/09/254,077A
  CURRENT FILING DATE: 1999-06-11
  PRIOR APPLICATION NUMBER: PCT/AU97/00540
  PRIOR FILING DATE: 1997-08-22
  PRIOR APPLICATION NUMBER: PO 1823
  PRIOR FILING DATE: 1996-08-23
  NUMBER OF SEQ ID NOS: 12
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RESULT 9
US-09-954-456-45
; Sequence 45, Application US/09954456
 Patent No. US20020115057A1
 GENERAL INFORMATION:
  APPLICANT: Young, Paul
  TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Ca
  TITLE OF INVENTION: Sets
  FILE REFERENCE: 689290-76
  CURRENT APPLICATION NUMBER: US/09/954,456
  CURRENT FILING DATE: 2001-09-18
  PRIOR APPLICATION NUMBER: US/60/233,617
  PRIOR FILING DATE: 2000-09-18
  PRIOR APPLICATION NUMBER: US/60/234,052
  PRIOR FILING DATE: 2000-09-20
  PRIOR APPLICATION NUMBER: US/60/234,923
  PRIOR FILING DATE: 2000-09-25
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PRIOR APPLICATION NUMBER: US/60/235,134

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PRIOR FILING DATE: 2000-09-25
  PRIOR APPLICATION NUMBER: US/60/235,637
  PRIOR FILING DATE: 2000-09-26
  PRIOR APPLICATION NUMBER: US/60/235,638
  PRIOR FILING DATE: 2000-09-26
  PRIOR APPLICATION NUMBER: US/60/235,711
  PRIOR FILING DATE: 2000-09-27
  PRIOR APPLICATION NUMBER: US/60/235,720
  PRIOR FILING DATE: 2000-09-27
  PRIOR APPLICATION NUMBER: US/60/235,840
  PRIOR FILING DATE: 2000-09-27
  PRIOR APPLICATION NUMBER: US/60/235,863
  PRIOR FILING DATE: 2000-09-27
  NUMBER OF SEQ ID NOS: 2276
  SOFTWARE: PatentIn version 3.0
 SEQ ID NO 45
   LENGTH: 3088
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-954-456-45
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                     35.4%; Score 449.4; DB 3;
                                             Length 3088;
 Best Local Similarity 71.5%; Pred. No. 6.8e-122;
 Matches 607; Conservative
                          0; Mismatches 236;
                                             Indels
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        355 CTGTACGCCCTGGCCAAGATGAACGGGCCGGCCTTCATCCCGGCCCAGATGCACAGC 414
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             949 CAGTGTAACCACCATCATGACCATTGGGACGTTCGGGATCTGGGCCGCATACCTCACG 1008
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Db
        1129 TTACTCAAG 1137
RESULT 10
US-09-954-456-1621
; Sequence 1621, Application US/09954456
; Patent No. US20020115057A1
; GENERAL INFORMATION:
; APPLICANT: Young, Paul
 TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Ca
  TITLE OF INVENTION: Sets
  FILE REFERENCE: 689290-76
  CURRENT APPLICATION NUMBER: US/09/954,456
  CURRENT FILING DATE: 2001-09-18
  PRIOR APPLICATION NUMBER: US/60/233,617
  PRIOR FILING DATE: 2000-09-18
  PRIOR APPLICATION NUMBER: US/60/234,052
  PRIOR FILING DATE: 2000-09-20
  PRIOR APPLICATION NUMBER: US/60/234,923
  PRIOR FILING DATE: 2000-09-25
 PRIOR APPLICATION NUMBER: US/60/235,134
 PRIOR FILING DATE: 2000-09-25
 PRIOR APPLICATION NUMBER: US/60/235,637
 PRIOR FILING DATE: 2000-09-26
 PRIOR APPLICATION NUMBER: US/60/235,638
 PRIOR FILING DATE: 2000-09-26
  PRIOR APPLICATION NUMBER: US/60/235,711
  PRIOR FILING DATE: 2000-09-27
  PRIOR APPLICATION NUMBER: US/60/235,720
  PRIOR FILING DATE: 2000-09-27
  PRIOR APPLICATION NUMBER: US/60/235,840
  PRIOR FILING DATE: 2000-09-27
  PRIOR APPLICATION NUMBER: US/60/235,863
 PRIOR FILING DATE: 2000-09-27
 NUMBER OF SEQ ID NOS: 2276
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1621
   LENGTH: 3088
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TYPE: DNA

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ORGANISM: Homo sapiens
US-09-954-456-1621
 Query Match
                    35.4%; Score 449.4; DB 3; Length 3088;
 Best Local Similarity
                    71.5%; Pred. No. 6.8e-122;
 Matches 607; Conservative
                          0; Mismatches 236;
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Qу
           295 GGGATGTGGACGATCAATGCAATAGGCCGCCTGGGGAACCAGATGGGCGAGTACGCCACA 354
Db
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Qу
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        355 CTGTACGCCCTGGCCAAGATGAACGGGCGGCCCGCCTTCATCCCGGCCCAGATGCACAGC 414
Db
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Qу
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Db
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           595 CAGGAGATCCTCCAGGAGTTCACCCTGCACGACCACGTGCGGGAGGAGGCCCAGAAGTTC 654
Db
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Qу
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                             655 CTGCG-----GGGCCTGCAGGTGAACGGGAGCCGGCCGGCACCTTTGTAGGGGTCCAT 708
Db
       Qу
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           829 GTGGTCACCAGTAATGGCATGGCCTGGTGTCGGGAGAACATTGACACCTCCCACGGTGAT 888
Db
       843 GTGATCTTTGCTGGCGATGGGCGGGGGGGCCGCCGCCAGGGACTTTGCGCTGCTGGTG 902
Qy
           889 GTGGTGTTTGCTGGCGATGGCATTGAGGGCTCACCTGCCAAAGATTTTGCTCTACTCACA 948
Db
       903 CAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGGCT 962
Qу
          949 CAGTGTAACCACCATCATGACCATTGGGACGTTCGGGATCTGGGCCGCATACCTCACG 1008
Db
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Qу
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RESULT 11
US-09-969-347-234
; Sequence 234, Application US/09969347
; Patent No. US20020115085A1
; GENERAL INFORMATION:
  APPLICANT: Ebner, Reinhard
  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signa
  TITLE OF INVENTION: Sets
  FILE REFERENCE: 689290-69
  CURRENT APPLICATION NUMBER: US/09/969,347
  CURRENT FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: US/60/237,598
  PRIOR FILING DATE: 2000-10-03
  PRIOR APPLICATION NUMBER: US/60/237,604
  PRIOR FILING DATE: 2000-10-03
  NUMBER OF SEQ ID NOS: 318
  SOFTWARE: PatentIn version 3.0
 SEQ ID NO 234
   LENGTH: 3088
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-969-347-234
 Query Match
 Query Match 35.4%; Score 449.4; DB 3; Length 3088; Best Local Similarity 71.5%; Pred. No. 6.8e-122;
 Matches 607; Conservative 0; Mismatches 236; Indels
                                                       6; Gaps
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Db
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Db
Qу
        363 GTCCTGGCCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCCGAGGTAGACAGGCAC 422
             1 111
Db
        415 ACCCTGGCCCCCATCTTCAGAATCACCCTGCCGGTGCTGCACAGCGCCACGGCCAGCAGG 474
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Db
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0v
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Db
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RESULT 12
US-10-843-641A-3072
; Sequence 3072, Application US/10843641A
; Publication No. US20050064454A1
; GENERAL INFORMATION:
 APPLICANT: Avalon Pharmaceuticals, Inc.
 TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using
  TITLE OF INVENTION: Signature Gene Sets
  FILE REFERENCE: 689290-189
 CURRENT APPLICATION NUMBER: US/10/843,641A
 CURRENT FILING DATE: 2004-05-12
 PRIOR APPLICATION NUMBER: US/09/873,367
 PRIOR FILING DATE: 2001-06-05
 PRIOR APPLICATION NUMBER: US/09/954,531.
 PRIOR FILING DATE: 2001-09-18
 PRIOR APPLICATION NUMBER: US/09/954,456
  PRIOR FILING DATE: 2001-09-25
  PRIOR APPLICATION NUMBER: US/09/962,436
  PRIOR FILING DATE: 2001-09-25
  PRIOR APPLICATION NUMBER: US/09/962,832
  PRIOR FILING DATE: 2001-09-25
  PRIOR APPLICATION NUMBER: US/09/964,824
 PRIOR FILING DATE: 2001-09-27
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PRIOR APPLICATION NUMBER: US/09/967,768

PRIOR APPLICATION NUMBER: US/09/968,007

PRIOR FILING DATE: 2001-09-28

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PRIOR FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: US/09/969,347
  PRIOR FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: US/09/969,708
  PRIOR FILING DATE: 2001-10-03
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 8447
  SOFTWARE: PatentIn version 3.0
 SEQ ID NO 3072
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   ORGANISM: Homo sapiens
US-10-843-641A-3072
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 Best Local Similarity 71.5%; Pred. No. 6.8e-122;
 Matches 607; Conservative
                           0; Mismatches 236;
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        303 CTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCC 362
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Db
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            Db
        769 CGGCGATACCTACAGCAGGCCCTGGACTGGTTCCGAGCTCGCTACAGCTCCCTCATCTTC 828
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Db
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             1069 TTTAAGCCAGAGGCAGCCTTCCTGCCGGAGTGGACAGGGATTGCCGCAGACCTGTCCCCC 1128
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        1129 TTACTCAAG 1137
RESULT 13
US-10-843-641A-4648
; Sequence 4648, Application US/10843641A
; Publication No. US20050064454A1
; GENERAL INFORMATION:
  APPLICANT: Avalon Pharmaceuticals, Inc.
  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using
  TITLE OF INVENTION: Signature Gene Sets
  FILE REFERENCE: 689290-189
  CURRENT APPLICATION NUMBER: US/10/843,641A
  CURRENT FILING DATE: 2004-05-12
  PRIOR APPLICATION NUMBER: US/09/873,367
  PRIOR FILING DATE: 2001-06-05
  PRIOR APPLICATION NUMBER: US/09/954,531
  PRIOR FILING DATE: 2001-09-18
  PRIOR APPLICATION NUMBER: US/09/954,456
  PRIOR FILING DATE: 2001-09-25
  PRIOR APPLICATION NUMBER: US/09/962,436
  PRIOR FILING DATE: 2001-09-25
  PRIOR APPLICATION NUMBER: US/09/962,832
  PRIOR FILING DATE: 2001-09-25
  PRIOR APPLICATION NUMBER: US/09/964,824
  PRIOR FILING DATE: 2001-09-27
  PRIOR APPLICATION NUMBER: US/09/967,768
  PRIOR FILING DATE: 2001-09-28
 PRIOR APPLICATION NUMBER: US/09/968,007
 PRIOR FILING DATE: 2001-10-02
 PRIOR APPLICATION NUMBER: US/09/969,347
 PRIOR FILING DATE: 2001-10-02
 PRIOR APPLICATION NUMBER: US/09/969,708
  PRIOR FILING DATE: 2001-10-03
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 8447
  SOFTWARE: PatentIn version 3.0
 SEQ ID NO 4648
   LENGTH: 3088
   TYPE: DNA
   ORGANISM: Homo sapiens
US-10-843-641A-4648
 Query Match
                       35.4%; Score 449.4; DB 10; Length 3088;
 Best Local Similarity
                       71.5%; Pred. No. 6.8e-122;
 Matches 607; Conservative
                             0; Mismatches 236;
                                                 Indels
                                                           6; Gaps
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Qу	303	CTGCTGGCCCTGGCGCAGCCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCC	
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Qу	363	GTCCTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGCAC	422
Db	415		474
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; Publication No. US20050064454A1
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  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using
; TITLE OF INVENTION: Signature Gene Sets
; FILE REFERENCE: 689290-189
; CURRENT APPLICATION NUMBER: US/10/843,641A
 CURRENT FILING DATE: 2004-05-12
  PRIOR APPLICATION NUMBER: US/09/873,367
  PRIOR FILING DATE: 2001-06-05
  PRIOR APPLICATION NUMBER: US/09/954,531
  PRIOR FILING DATE: 2001-09-18
  PRIOR APPLICATION NUMBER: US/09/954,456
  PRIOR FILING DATE: 2001-09-25
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  PRIOR APPLICATION NUMBER: US/09/964,824
  PRIOR FILING DATE: 2001-09-27
  PRIOR APPLICATION NUMBER: US/09/967,768
  PRIOR FILING DATE: 2001-09-28
  PRIOR APPLICATION NUMBER: US/09/968,007
  PRIOR FILING DATE: 2001-10-02
  PRIOR APPLICATION NUMBER: US/09/969,347
  PRIOR FILING DATE: 2001-10-02
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  PRIOR FILING DATE: 2001-10-03
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  NUMBER OF SEQ ID NOS: 8447
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; Publication No. US20050181375A1
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  APPLICANT: Zlotnik, Albert
  TITLE OF INVENTION: NOVEL METHODS OF DIAGNOSIS OF METASTATIC CANCER, COMPOSITIONS A
  TITLE OF INVENTION: METHODS OF SCREENING FOR MODULATORS OF METASTATIC CANCER
  FILE REFERENCE: file
  CURRENT APPLICATION NUMBER: US/10/756,149
  CURRENT FILING DATE: 2004-01-12
  NUMBER OF SEQ ID NOS: 5818
  SOFTWARE: PatentIn version 3.2
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; TYPE: DNA

; ORGANISM: Homo Sapiens

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SCORE Search Results Details for Application 09844268 and Search Result us-09-844-268-12.rnpbn.

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OM nucleic - nucleic search, using sw model

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and is derived by analysis of the total score distribution.

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- ; Publication No. US20060134663A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Harkin, Paul
- ; APPLICANT: Johnston, Patrick

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APPLICANT: Mulligan, Karl
   TITLE OF INVENTION: Transcriptome Microarray Technology and
   TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
   CURRENT APPLICATION NUMBER: US/11/266,748A
   CURRENT FILING DATE: 2005-11-03
   PRIOR APPLICATION NUMBER: EP 04105479.2
   PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105482.6
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105483.4
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105507.0
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105485.9
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105484.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
  PRIOR APPLICATION NUMBER: US 60/700,293
  PRIOR FILING DATE: 2005-07-18
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  SOFTWARE: PatentIn version 3.3
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   TYPE: DNA
   ORGANISM: Homo Sapiens
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  APPLICANT: Harkin, Paul
  APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
  TITLE OF INVENTION: Transcriptome Microarray Technology and
  TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
  CURRENT FILING DATE: 2005-11-03
  PRIOR APPLICATION NUMBER: EP 04105479.2
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Qy
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               355 CTGTACGCCCTGGCCAAGATGAACGGGCGGCCCGCCTTCATCCCGGCCCAGATGCACAGC 414
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       Db
       423 GCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAG 482
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       723 GGCCGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTT 782
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           769 CGGCGATACCTACAGCAGGCCCTGGACTGGTTCCGAGCTCGCTACAGCTCCCTCATCTTC 828
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US-11-266-748A-61104
; Sequence 61104, Application US/11266748A
; Publication No. US20060134663A1
; GENERAL INFORMATION:
  APPLICANT: Harkin, Paul
  APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
  TITLE OF INVENTION: Transcriptome Microarray Technology and
  TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
  CURRENT FILING DATE: 2005-11-03
  PRIOR APPLICATION NUMBER: EP 04105479.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105482.6
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105483.4
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105507.0
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105485.9
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105484.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
; PRIOR APPLICATION NUMBER: US 60/700,293
; PRIOR FILING DATE: 2005-07-18
 NUMBER OF SEQ ID NOS: 483996
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 61104
  LENGTH: 1784
   TYPE: DNA
   ORGANISM: Homo Sapiens
US-11-266-748A-61104
 Query Match
                      35.3%; Score 447.8; DB 8; Length 1784;
 Best Local Similarity 71.4%; Pred. No. 7.1e-101;
 Matches 606; Conservative 0; Mismatches 237;
                                                Indels
                                                         6; Gaps
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            245 GGGATGTGGACGATCAATGCGATAGGCCGCCTGGGGAACCAGATGGGCGAGTACGCCACA 304
Db
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Qу
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Db	365		424
Qy	423	GCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAG	482
Db	425	ATCCCCTGGCAGAACTACCACCTGAACGACTGGATGGAGGAGGAATACCGCCACATCCCG	484
QУ	483	GAGCCCTGGCTGAAGCTCACCGGCTTCCCCTGCTCCTGGACCTTCTTCCACCACCTCCGG	542
Db	485	GGGGAGTACGTCCGCTTCACCGGCTACCCCTGCTCCTAGACCTTCTACCACCACCTCCGC	544
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Qy	603	CTGAGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCCAC	662
Db	605	CTGCGGGGCCTGCAGGTGAACGGGAGCCGGCCGGGCACCTTTGTAGGGGTCCAT	658
Qу	663	GTGCGCCGCGGGACTATCTGCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGTGAC	722
Db	659	GTTCGCCGAGGGGACTATGTCCATGTCATGCCAAAAGTGTGGAAGGGGGTGGTGGCCGAC	718
Qу	723	GGCCGTTACCTCCAGCAGGCTATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTT	782
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QУ	783	GTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGGAC	842
Db		GTGGTCACCAGTAATGGCATGGCCTGGTGTCGGGAGAACATTGACACCTCCCACAGTGAT	
Qy		GTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGGTG	
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QУ		GGTGGAGATACCATCTACTTGGCTAACTTCACCCTGCCCACTTCCAGCTTCCTGAAGATC	
Db		GGCGGAGACACCATCTACCTGGCCAATTACACCCTCCCCGACTCCCCTTTCCTCAAAATC	
Qу		TTTAAACCCGAGGCTGCCTTCCTGCCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCA	
Db	1019	TTTAAGCCAGAGGCAGCCTTCCTGCCGGAGTGGACGGGGATTGCCGCAGACCTGTCCCCC	1078
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Db	1079	TTACTCAAG 1087	

RESULT 4

US-11-266-748A-73885/c

[;] Sequence 73885, Application US/11266748A

[;] Publication No. US20060134663A1

[;] GENERAL INFORMATION:

[;] APPLICANT: Harkin, Paul

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APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
  TITLE OF INVENTION: Transcriptome Microarray Technology and
  TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
  CURRENT FILING DATE: 2005-11-03
  PRIOR APPLICATION NUMBER: EP 04105479.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105482.6
; PRIOR FILING DATE: 2004-11-03
; PRIOR APPLICATION NUMBER: EP 04105483.4
; PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105507.0
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105485.9
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105484.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
  PRIOR APPLICATION NUMBER: US 60/700,293
  PRIOR FILING DATE: 2005-07-18
 NUMBER OF SEQ ID NOS: 483996
 SOFTWARE: PatentIn version 3.3
; SEQ ID NO 73885
   LENGTH: 1076
   TYPE: DNA
   ORGANISM: Homo Sapiens
US-11-266-748A-73885
 Query Match 29.3%; Score 371.2; DB 8; Length 1076; Best Local Similarity 70.5%; Pred. No. 5.2e-82;
 Matches 512; Conservative 0; Mismatches 208; Indels
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            782 GGGATGTGGACGATCAATGCGATAGGCCGCCTGGGGAACCAGATGGGCGAGTACGCCACA 723
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        303 CTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCC 362
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                722 CTGTATGCCCTGGCCAAGATGAACGGGCGGCCCGCCTTCATCCCGGCCCAGATGCACAGC 663
Db
Qу
        363 GTCCTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGCAC 422
             662 ACCCTGGCCCCCATCTTCAGAATCACCCTGCCGGTGCTGCACAGCGCCACGGCCAGCAGG 603
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        423 GCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAG 482
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RESULT 5
US-11-266-748A-126696
; Sequence 126696, Application US/11266748A
; Publication No. US20060134663A1
; GENERAL INFORMATION:
 APPLICANT: Harkin, Paul
  APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
  TITLE OF INVENTION: Transcriptome Microarray Technology and
  TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
 CURRENT FILING DATE: 2005-11-03
  PRIOR APPLICATION NUMBER: EP 04105479.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105482.6
  PRIOR FILING DATE: 2004-11-03
 PRIOR APPLICATION NUMBER: EP 04105483.4
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105507.0
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105485.9
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105484.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
  PRIOR APPLICATION NUMBER: US 60/700,293
 PRIOR FILING DATE: 2005-07-18
 NUMBER OF SEQ ID NOS: 483996
 SOFTWARE: PatentIn version 3.3
; SEQ ID NO 126696
   LENGTH: 1076
   TYPE: DNA
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; ORGANISM: Homo Sapiens US-11-266-748A-126696

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Query Match
                     29.3%; Score 371.2; DB 8;
                                             Length 1076;
  Best Local Similarity
                     70.5%;
                            Pred. No. 5.2e-82;
  Matches 512; Conservative
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RESULT 6

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US-11-266-748A-210852/c
; Sequence 210852, Application US/11266748A
 Publication No. US20060134663A1
; GENERAL INFORMATION:
   APPLICANT: Harkin, Paul
  APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
   TITLE OF INVENTION: Transcriptome Microarray Technology and
   TITLE OF INVENTION: Methods of Using the Same
   FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
   CURRENT FILING DATE: 2005-11-03
   PRIOR APPLICATION NUMBER: EP 04105479.2
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105482.6
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105483.4
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105507.0
   PRIOR FILING DATE: 2004-11-03
   PRIOR APPLICATION NUMBER: EP 04105485.9
   PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105484.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
   PRIOR APPLICATION NUMBER: US 60/700,293
  PRIOR FILING DATE: 2005-07-18
  NUMBER OF SEQ ID NOS: 483996
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 210852
   LENGTH: 1000
   TYPE: DNA
   ORGANISM: Homo Sapiens
US-11-266-748A-210852
  Query Match
                       16.5%; Score 210; DB 8; Length 1000;
  Best Local Similarity
                       69.1%; Pred. No. 3.7e-42;
 Matches 318; Conservative
                              0; Mismatches 135; Indels
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US-11-266-748A-369805
; Sequence 369805, Application US/11266748A
; Publication No. US20060134663A1
; GENERAL INFORMATION:
  APPLICANT: Harkin, Paul
  APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
  TITLE OF INVENTION: Transcriptome Microarray Technology and
  TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
  CURRENT FILING DATE: 2005-11-03
  PRIOR APPLICATION NUMBER: EP 04105479.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105482.6
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105483.4
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105507.0
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105485.9
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105484.2
 .PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
  PRIOR APPLICATION NUMBER: US 60/700,293
  PRIOR FILING DATE: 2005-07-18
  NUMBER OF SEQ ID NOS: 483996
  SOFTWARE: PatentIn version 3.3
 SEQ ID NO 369805
   LENGTH: 807
   TYPE: DNA
   ORGANISM: Homo Sapiens
US-11-266-748A-369805
                       8.0%; Score 101.6; DB 8;
 Query Match
                                                 Length 807;
 Best Local Similarity 63.5%; Pred. No. 2.2e-15;
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                                                 Indels
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Qу
            266 GGGATGTGGACGATCAATGCAATAGGCCGCCTGGGGAACCAGATGGGCGAGTACGCCACA 325
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Qy
        303 CTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCC 362
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RESULT 8
US-11-266-748A-453184/c
; Sequence 453184, Application US/11266748A
; Publication No. US20060134663A1
; GENERAL INFORMATION:
  APPLICANT: Harkin, Paul
  APPLICANT: Johnston, Patrick
  APPLICANT: Mulligan, Karl
  TITLE OF INVENTION: Transcriptome Microarray Technology and
  TITLE OF INVENTION: Methods of Using the Same
  FILE REFERENCE: 55815-0102 (319189)
  CURRENT APPLICATION NUMBER: US/11/266,748A
  CURRENT FILING DATE: 2005-11-03
  PRIOR APPLICATION NUMBER: EP 04105479.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105482.6
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105483.4
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105507.0
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105485.9
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: EP 04105484.2
  PRIOR FILING DATE: 2004-11-03
  PRIOR APPLICATION NUMBER: US 60/662,276
  PRIOR FILING DATE: 2005-03-14
  PRIOR APPLICATION NUMBER: US 60/700,293
  PRIOR FILING DATE: 2005-07-18
  NUMBER OF SEQ ID NOS: 483996
  SOFTWARE: PatentIn version 3.3
 SEQ ID NO 453184
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   ORGANISM: Homo Sapiens
US-11-266-748A-453184
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                       8.0%; Score 101.6; DB 8;
                                                 Length 807;
 Best Local Similarity 63.5%; Pred. No. 2.2e-15;
 Matches 188; Conservative 0; Mismatches 104; Indels
                                                             Gaps
                                                                     2;
        243 GGGACCTGGACTATTTACCCGGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACG 302
Qу
            542 GGGATGTGGACGATCAATGCAATAGGCCGCCTGGGGAACCAGATGGGCGAGTACGCCACA 483
        303 CTGCTGGCCCTGGCGCAGCTCAACGGCCGCCAGGCCTTCATCCAGCCTGCCATGCACGCC 362
Qу
                 482 CTGTACGCCCTGGCCAAGATGAACGGGCCGGCCCTTCATCCCGGCCCAGATGCACAGC 423
Db
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Qу
        363 GTCCTGGCCCCGTGTTCCGCATCACGCTGCCTGTCCTGGCGCCCGAGGTAGACAGGCAC 422
             Db
        422 ACCCTGGCCCCCATCTTCAGAATCACCCTGCCGGTGCTGCACAGCGCCACGGCCAGCAGG 363
        423 GCTCCTTGGCGGGAGCTGGAGCTTCACGACTGGATGTCCGAGGATTATGCCCACTTAAAG 482
Qу
              Db
        483 GAGCCCT--GGCTGAAGCTCACCGGCTT--CCCCTGCTCCTGGACCTTCTTCCACC 534
Qу
           Db
        302 GGGGGATTACGTTCCGCTTCACCGGCCTACCCCTGGCTCCTAGACCTTCTACCACC 247
RESULT 9
US-10-561-201-3/c
; Sequence 3, Application US/10561201
; Publication No. US20060211115A1
; GENERAL INFORMATION:
 APPLICANT: The Trustees of the University of Pennsylvania
  APPLICANT: Roy, Soumitra
  APPLICANT: Wilson, James M.
  TITLE OF INVENTION: Methods of Generating Chimeric Adenoviruses and Uses For Such
 TITLE OF INVENTION: Chimeric Adenoviruses
 FILE REFERENCE: UPN-P3067PCT
 CURRENT APPLICATION NUMBER: US/10/561,201
 CURRENT FILING DATE: 2005-12-19
 PRIOR APPLICATION NUMBER: US 10/465,302
 PRIOR FILING DATE: 2003-06-20
 PRIOR APPLICATION NUMBER: US 60/566,212
 PRIOR FILING DATE: 2004-04-28
  PRIOR APPLICATION NUMBER: US 60/575,429
  PRIOR FILING DATE: 2004-05-28
 NUMBER OF SEQ ID NOS: 18
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
   LENGTH: 36535
   TYPE: DNA
   ORGANISM: chimpanzee adenovirus serotype Pan7
US-10-561-201-3
 Query Match
                     3.8%; Score 48.6; DB 6; Length 36535;
 Best Local Similarity 54.1%; Pred. No. 0.11;
        99; Conservative 0; Mismatches
                                        84;
                                           Indels
        773 CCCCGTCTTTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTC 832
Qу
           7852 CACCTACGATGTGGAAACCTACACCTGGATGGGGTCCTTCGGCAAGCAGCTCGTCCCCTT 7793
Db
        833 CCGGGGGACGTGATCTTTGCTGGCGATGGGCGGGGGGGCCGCCGCCAGGGACTTTGC 892
Qy
           Db
       7792 CATGCTGGTCATGAAACTCTCCGGGGACCCGCCGCTCGTCGAGCTCGCCCACGACCTCGC 7733
        893 GCTGCTGGTGCAGTGCAACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGC 952
Qy
            7732 CCTCCAGCTCAAGTGGGACCGCTGGCACGGGGACCCCGGCACCTTCTACTGCGTCACCCC 7673
Db
Qу
        953 CTA 955
           1 1
Db
       7672 CGA 7670
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RESULT 10
US-10-561-201-2/c
; Sequence 2, Application US/10561201
; Publication No. US20060211115A1
; GENERAL INFORMATION:
  APPLICANT: The Trustees of the University of Pennsylvania
  APPLICANT: Roy, Soumitra
  APPLICANT: Wilson, James M.
  TITLE OF INVENTION: Methods of Generating Chimeric Adenoviruses and Uses For Such
  TITLE OF INVENTION: Chimeric Adenoviruses
  FILE REFERENCE: UPN-P3067PCT
  CURRENT APPLICATION NUMBER: US/10/561,201
; CURRENT FILING DATE: 2005-12-19
; PRIOR APPLICATION NUMBER: US 10/465,302
; PRIOR FILING DATE: 2003-06-20
; PRIOR APPLICATION NUMBER: US 60/566,212
; PRIOR FILING DATE: 2004-04-28
; PRIOR APPLICATION NUMBER: US 60/575,429
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 18
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
   LENGTH: 36604
   TYPE: DNA
   ORGANISM: chimpanzee adenovirus serotype Pan6
US-10-561-201-2
 Query Match
                        3.8%; Score 48.6; DB 6; Length 36604;
 Best Local Similarity 54.1%; Pred. No. 0.11;
 Matches 99; Conservative 0; Mismatches
                                             84; Indels
                                                           0; Gaps
                                                                      0;
Qy ·
         773 CCCCGTCTTTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTC 832
             Db
        7846 CACCTACGATGTGGAAACCTACACCTGGATGGGGTCCTTCGGCAAGCAGCTCGTCCCCTT 7787
        833 CCGGGGGACGTGATCTTTGCTGGCGATGGGCGGAGGCCGCCGCCAGGGACTTTGC 892
Qу
            7786 CATGCTGGTCATGAAACTCTCCGGGGACCCGCCGCTCGTCGAGCTCGCCCACGACCTCGC 7727
Db
        893 GCTGCTGGTGCAGCCACCACCATCATGACCATTGGCACCTTCGGCCTCTGGGCCGC 952
Qу
             7726 CCTCCAGCTCAAGTGGGACCGCTGGCACGGCGACCCTCTACTGCGTCACCCC 7667
Db
         953 CTA 955
Qу
            1 1
Db
        7666 CGA 7664
RESULT 11
US-11-218-305-13034
; Sequence 13034, Application US/11218305
; Publication No. US20060141495A1
; GENERAL INFORMATION:
; APPLICANT: MONSANTO TECHNOLOGY, LLC
; APPLICANT: McLaird, Paul L.
; APPLICANT: Tao, Nengbing
; APPLICANT: Wu, Kunsheng
 TITLE OF INVENTION: Polymorphic Markers and Methods of Genotyping
  TITLE OF INVENTION: Corn.
 FILE REFERENCE: 38-21 (53660)B
```

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CURRENT APPLICATION NUMBER: US/11/218,305
  CURRENT FILING DATE: 2005-09-01
  PRIOR APPLICATION NUMBER: US 60/606,880
  PRIOR FILING DATE: 2004-09-01
  NUMBER OF SEQ ID NOS: 25043
  SOFTWARE: PatentIn version 3.2
 SEQ ID NO 13034
   LENGTH: 6573
   TYPE: DNA
   ORGANISM: Zea mays
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (214)..(214)
   OTHER INFORMATION: n is a, c, g, or t
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (1342)..(1342)
   OTHER INFORMATION: n is a, c, g, or t
   NAME/KEY: misc feature
   LOCATION: (3788)..(3788)
   OTHER INFORMATION: n is a, c, g, or t
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (5035)..(5035)
   OTHER INFORMATION: n is a, c, g, or t
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (5217)..(5217)
   OTHER INFORMATION: n is a, c, g, or t
US-11-218-305-13034
 Query Match
                       3.7%; Score 47.4; DB 9; Length 6573;
 Best Local Similarity 48.0%; Pred. No. 0.12;
 Matches 135; Conservative
                            0; Mismatches 146; Indels
                                                        0;
                                                            Gaps
                                                                   0;
Qу
        683 GCGTGTGATGCCCAAGCGCTGGAAGGGGGTGGTGGGTGACGGCCGTTACCTCCAGCAGGC 742
                        - 1
Dh
       743 TATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTTTGTGGTCACCAGCAACGGCAT 802
Qу
             Db
       2642 GCTGCACATGGACCCGCCGCGCGCCCCGCGCGCCGCTCAGTGTCGACCAGCTGCGACCT 2701
        803 GGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGGGACGTGATCTTTGCTGGCGATGG 862
Qy .
               Db
       2702 GCACCCGGGCGAGACGTTCACCGGCTTCTGCGCCGCGTGCCTGCGCGAGCGCCTCCACGG 2761
Qy
        863 GCGGGAGGCCGCCCGCCAGGGACTTTGCGCTGCTGCTGCTGCAGCCACCACCATCAT 922
             111 11
Dh
       2762 TCTCGAGGCGTCCGCCGCCGCCGCCGCCGCGGGGGGGGGCGCAAGTCCACATCGGCCATCCG 2821
        923 GACCATTGGCACCTTCGGCTTCTGGGCCGCCTACCTGGCTG 963
QУ
                   1 11
                            111
                                 2822 GTCCCTGTTCGCCAGGCCGTTCGCCGCCGGCAGCTCGTCTG 2862
RESULT 12
US-10-561-201-1/c
; Sequence 1, Application US/10561201
; Publication No. US20060211115A1
```

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; GENERAL INFORMATION:
 APPLICANT: The Trustees of the University of Pennsylvania
  APPLICANT: Roy, Soumitra
  APPLICANT: Wilson, James M.
  TITLE OF INVENTION: Methods of Generating Chimeric Adenoviruses and Uses For Such
  TITLE OF INVENTION: Chimeric Adenoviruses
  FILE REFERENCE: UPN-P3067PCT
  CURRENT APPLICATION NUMBER: US/10/561,201
  CURRENT FILING DATE: 2005-12-19
  PRIOR APPLICATION NUMBER: US 10/465,302
  PRIOR FILING DATE: 2003-06-20
  PRIOR APPLICATION NUMBER: US 60/566,212
; PRIOR FILING DATE: 2004-04-28
; PRIOR APPLICATION NUMBER: US 60/575,429
  PRIOR FILING DATE: 2004-05-28
  NUMBER OF SEQ ID NOS: 18
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
   LENGTH: 36462
   TYPE: DNA
   ORGANISM: chimpanzee adenovirus serotype Pan5
US-10-561-201-1
 Query Match
                       3.7%; Score 47; DB 6; Length 36462;
 Best Local Similarity 53.6%; Pred. No. 0.27;
 Matches 98; Conservative
                            0; Mismatches
                                            85; Indels
                                                         0; Gaps
                                                                    0;
        773 CCCCGTCTTTGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTC 832
Qу
            7840 CACCTACGACGTGGAAACCTACACCTGGATGGGGTCCTTCGGCAAGCAGCTCGTCCCCTT 7781
Qу
        7780 CATGCTGGTCATGAAACTCTCCGGGGACCCGCCGCTCGTCGAGCTCGCCCACGACCTCGC 7721
Db
        893 GCTGCTGGTGCAGCCACCACCATCATGACCATTGGCACCTTCGGCTTCTGGGCCGC 952
Qy
             Db
        7720 CCTCCAGCTCAAGTGGGACCGCTGGCACGGCGACCCCGCACCTTCTACTGCGTCACCCC 7661
        953 CTA 955
Qу
            1 1
Db
        7660 CGA 7658
RESULT 13
US-11-218-305-24825/c
; Sequence 24825, Application US/11218305
; Publication No. US20060141495A1
; GENERAL INFORMATION:
 APPLICANT: MONSANTO TECHNOLOGY, LLC
 APPLICANT: McLaird, Paul L.
; APPLICANT: Tao, Nengbing
 APPLICANT: Wu, Kunsheng
 TITLE OF INVENTION: Polymorphic Markers and Methods of Genotyping
 TITLE OF INVENTION: Corn.
 FILE REFERENCE: 38-21 (53660)B
  CURRENT APPLICATION NUMBER: US/11/218,305
  CURRENT FILING DATE: 2005-09-01
  PRIOR APPLICATION NUMBER: US 60/606,880
  PRIOR FILING DATE: 2004-09-01
  NUMBER OF SEQ ID NOS: 25043
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SOFTWARE: PatentIn version 3.2
  SEQ ID NO 24825
   LENGTH: 1158
   TYPE: DNA
   ORGANISM: Zea mays
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (4)..(4)
   OTHER INFORMATION: n is a, c, g, or t
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (19)..(19)
   OTHER INFORMATION: n is a, c, g, or t
   FEATURE:
   NAME/KEY: misc_feature
   LOCATION: (36)..(36)
   OTHER INFORMATION: n is a, c, g, or t
US-11-218-305-24825
 Query Match
                       3.7%; Score 46.6; DB 9; Length 1158;
 Best Local Similarity 48.3%; Pred. No. 0.099;
 Matches 130; Conservative
                            0; Mismatches 139; Indels
                                                       0;
                                                          Gaps
        272 GTTTGGGAACCAGATGGGACAGTATGCCACGCTGCTGGCCCTGGCGCAGCTCAACGGCCG 331
Qу
            Db
        564 GTTCGGGCTCATGTACGCCTACTTTGCGACGGTGATGGACAAAGCGCGGAGGGTCCGCGC 505
Qy
        332 CCAGGCCTTCATCCAGCCTGCCATGCACGCCGTCCTGGCCCCCGTGTTCCGCATCACGCT 391
                      1 1 1 11
                                504 CGGCGCCGGAGCGCTGGCGGCGCCGCTCGCCGTGGGGCCCCAACGTGCT 445
Db
        392 GCCTGTCCTGGCGCCCGAGGTAGACAGGCACGCTCCTTGGCGGGAGCTGGAGCTTCACGA 451
Qу
                    +111
                                            Db
        452 CTGGATGTCCGAGGATTATGCCCACTTAAAGGAGCCCTGGCTGAAGCTCACCGGCTTCCC 511
Qу
                1 ‡ 1
                        - 1
                              Db
        512 CTGCTCCTGGACCTTCTTCCACCACCTCC 540
Qy
           1 11 11
                    Db
        324 CGGCCTCTCCGGCGTCGTCTACGAGCACC 296
RESULT 14
US-11-056-355B-63909
; Sequence 63909, Application US/11056355B
; Publication No. US20060150283A1
; GENERAL INFORMATION:
 APPLICANT: Brover, Vyacheslav
  APPLICANT: Alexandrov, Nickolai
  TITLE OF INVENTION: Sequence Determined DNA Fragments and Corresponding
  TITLE OF INVENTION: Polypeptides Encoded Thereby
 FILE REFERENCE: 2750-1590PUS2
; CURRENT APPLICATION NUMBER: US/11/056,355B
; CURRENT FILING DATE: 2005-02-14
; PRIOR APPLICATION NUMBER: 60/544,190
; PRIOR FILING DATE: 2004-02-13
; NUMBER OF SEQ ID NOS: 119966
; SEQ ID NO 63909
   LENGTH: 1196
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TYPE: DNA
   ORGANISM: Triticum aestivum
   FEATURE:
   NAME/KEY: misc feature
   LOCATION: (1)..(1196)
   OTHER INFORMATION: Ceres Seq. ID no. 12616895
US-11-056-355B-63909
 Query Match
                     3.7%; Score 46.6; DB 9; Length 1196;
 Best Local Similarity 47.4%; Pred. No. 0.1;
 Matches 174; Conservative
                         0; Mismatches 189;
                                             Indels
                                                               1;
        546 CAGATCCGCAGCGAGTTCACCCTGCACGACCACCTTCGGCAAGAGGCCCAGGGGGTACTG 605
           609 CATGTCCTCCGATCTCTCCCCCATCCAGTCCGGCTGCTGCAAGCCTCCGATCAGCTGCGG 668
Db
        606 AGTCAGTTCCGTCTACCCCGCACAGGGGACCGCCCCAGCACCTTCGTGGGGGTCCACGTG 665
Qу
             - 11
Db
        669 CTTCACCTACGTCAACAGCACGCAATGGACCGGCCCCGCCAAGTCGACGGAGCCCGACTG 728
        Qy
           Db
        729 CGGCGCGTGGTCCAACGACGGGGCGCTCTGCTACGGCTGCCAGTCGTGCAAGGCCGGCGT 788
        726 CGTTACCTCCAGCAGGC----TATGGACTGGTTCCGGGCCCGATACGAAGCCCCCGTCTT 781
Qy
            789 GGTGGCCACCCTCAAGCGCAATTGGAAGCGCTCCGCCATCATCAACATCGTCTTCCTCGT 848
Db
        782 TGTGGTCACCAGCAACGGCATGGAGTGGTGCCGGAAGAACATCGACACCTCCCGGGGGGA 841
Qу
             849 CTTCATCATCATTGTCTACTCCGTCGGCTGCTGCGCCTTCAGGAACAACCGCCGCGACCA 908
Db
        842 CGTGATCTTTGCTGGCGATGGGCGGGAGGCCGCCGCCAGGGACTTTGCGCTGCTGGT 901
Qу
             | | | | |
        909 CCGCAACGGCGGGGTACAAGCAGCAGGGCGCGTACGCCTGATCGTTTGGCTCGGTTAT 968
        902 GCAGTGC 908
Qу
            1 111
Dh
        969 TTATTGC 975
RESULT 15 '
US-11-218-305-24824/c
; Sequence 24824, Application US/11218305
; Publication No. US20060141495A1
; GENERAL INFORMATION:
 APPLICANT: MONSANTO TECHNOLOGY, LLC
 APPLICANT: McLaird, Paul L.
; APPLICANT: Tao, Nengbing
; APPLICANT: Wu, Kunsheng
; TITLE OF INVENTION: Polymorphic Markers and Methods of Genotyping
; TITLE OF INVENTION: Corn.
; FILE REFERENCE: 38-21 (53660)B
 CURRENT APPLICATION NUMBER: US/11/218,305
 CURRENT FILING DATE: 2005-09-01
  PRIOR APPLICATION NUMBER: US 60/606,880
  PRIOR FILING DATE: 2004-09-01
  NUMBER OF SEQ ID NOS: 25043
 SOFTWARE: PatentIn version 3.2
; SEQ ID NO 24824
  LENGTH: 1217
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TYPE: DNA
  ORGANISM: Zea mays
US-11-218-305-24824
 Query Match
                 3.5%; Score 45; DB 9; Length 1217;
 Best Local Similarity 48.0%; Pred. No. 0.25;
 Matches 129; Conservative
                     0; Mismatches 140; Indels
                                           0; Gaps
                                                   0;
Qу
      272 GTTTGGGAACCAGATGGGACAGTATGCCACGCTGCTGGCCCTGGCGCAGCTCAACGGCCG 331
         599 GTTCGGGCTCATGTACGCCTACTTTGCGACGGTGATGGACAAAGCGCGGAGGGTCCGCGC 540
      332 CCAGGCCTTCATCCAGCCTGCCATGCACGCCGTCCTGGCCCCCGTGTTCCGCATCACGCT 391
Qу
           111
               539 CGGCGCCGGAGCGCTGGCGGCGCCGCTCGCCGTGGGGCTTCTGGCGGGGGCCAACGTGCT 480
Db
      392 GCCTGTCCTGGCGCCCCGAGGTAGACAGGCACGCTCCTTGGCGGGAGCTGGAGCTTCACGA 451
Qу
            Db
      452 CTGGATGTCCGAGGATTATGCCCACTTAAAGGAGCCCTGGCTGAAGCTCACCGGCTTCCC 511
Qу
         Db
      Qу
      512 CTGCTCCTGGACCTTCTTCCACCACCTCC 540
         359 CGGCCTCTCCGGCGTCGTCTACGAGCACC 331
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Search completed: November 14, 2006, 02:47:14 Job time: 353 secs

SCORE 1.3 BuildDate: 12/06/2005